THE MAGAZINE FOR
GROWING COMPANIES

SPECIAL ISSUE
THE INC.
500

DEC. 1989
$3.00

1989 500

AMERICA'S FASTEST-GROWING PRIVATE COMPANIES

CONTENTS

THE INC. 500

66 Where the Growth Is *BY JOHN CASE*
Introducing America's fastest-growing small private companies

78 #1: Full Steam Ahead *BY EDWARD O. WELLES*
How Cogentrix rode the energy crisis all the way to the top of the list

83 The INC. 500 Index
An alphabetical listing of the companies

87 The List of Companies
From #1 to #500, facts on growth, revenues, employees, and profits

125 Growth Strategies
From short-line railroads to gourmet pizza, eight paths to the INC. 500

FEATURES

46 FACE-TO-FACE
Thriving on Order
If you *really* want to grow your business, says Steve Bostic, you have to minimize risk and plan, plan, plan

140 CONTROLLING HEALTH COSTS
Help Wanted *BY STEPHEN D. SOLOMON*
Steps you can take to hold down the rising costs of health care

COLUMNS

33 The New Economy: Return of the Giants. *BY JOHN CASE*
What Hollywood can teach us about the end of the entrepreneurial era

36 Required Reading: Second Wind. *TOM RICHMAN*
Sure, start-ups are tough. But it's even tougher to revitalize a mature business

41 Policy: Will Europe Blow It? *BY JOEL KOTKIN*
Why 1992 could be a disaster for European entrepreneurs

159 Marketing: The Shotgun Solution. *BY PAUL B. BROWN*
Target marketing. Focused marketing. Pinpoint marketing. They're all the rage, but what if they're wrong?

163 Capital: Strapped for Expansion Cash? *BY ELLYN E. SPRAGINS*
Some investors are providing it by combining the leverage of a buyout and the growth potential of venture capital

171 Managing People: Holding Your Own. *BY BRUCE G. POSNER*
What to do when your company outgrows the managers who have been with you from the start

175 Finance: A Confidence Game. *BY JILL ANDRESKY FRASER*
How to take the mystery—and uncertainty—out of your company's cash flow

181 Managing Technology: Fast Talk. *BY TOM RICHMAN*
Setting up computer links with customers makes life easier all around

DEPARTMENTS

11 Letters: Readers write about teaching entrepreneurship, business angels, and other matters; Focus on the competitiveness debate

21 Network: Readers offer advice about starting a business, finding money to grow, and selecting the right company name

26 Insider: Business and the environment; the CEO as schoolteacher; Mr. Fix It; Hotline; New Businesses

154 Hands On: Tips on customer relations, recruiting, managing a sales force, and how to save money on software

204 Investing in Growth Companies/Street Talk: The minicrash of '89

INC. COVER STORY

66 Sheila West, #151
The people behind the INC. 500

46 Steve Bostic
How to plan for fast growth

140 Mark Kaplan
A strategy for containing health costs

WHERE THE GROWTH IS

THE 1989 INC. 500

AMERICA'S FASTEST-GROWING PRIVATE COMPANIES

BY JOHN CASE

If there had been an INC. 500 back in 1810—maybe in those simpler days it would have been an INC. 50—Eli Terry's company would surely have made the list. The Connecticut clock maker had started his business only a few years earlier, but by 1810 he was cranking out an unheard-of 3,000 clocks a year.

Worth an article, no doubt. Sent to investigate this fast-growth company, an INC. reporter of the day would have come back astonished. This guy Terry doesn't build clocks to order, like everyone else; he makes them first, *then* he sells them. His 12 workmen use high-tech, water-powered machinery to turn out big batches of parts. And—get this—his clocks are sold to customers by a huge network of Yankee peddlers, as far south as Richmond and as far west as Buffalo. Some of the peddlers don't even ask for money until their next visit.

In 1989 we tend to be jaded about such things. But in 1810 factory-style production and nationwide, buy-now-pay-later marketing were harbingers of a business revolution. From such seeds came the mass-production economy of the late nineteenth century.

Which makes you wonder: who are the Eli Terrys of today? Where are they located, and what businesses are they in? What can the companies they run tell us about tomorrow's business landscape?

Welcome to this year's list of the 500 fastest-growing privately held companies in America. It has become a truism to say that the business marketplace is undergoing convulsive change. Yet here are 500 enterprises that—far from being swamped by economic upheavals—have somehow managed to take advantage of them, to get out in front, to grow at stunning speed despite ever-more-intense competition. Just perusing the list, as we'll see below, tells us much about how the U.S. economy is evolving. And as for running a company—well, like Terry, the chief executives of the INC. 500 have learned to manage for the marketplace of the future rather than that of the past. We'd be poor students if we couldn't take home a few pointers from their experience.

So choose your curriculum. The profiles beginning on page 125 show how the strategies that got some of this year's winners where they are today. The story of this year's #1 company—Cogentrix Inc.—begins on page 78. The list itself begins on page 87, and there's an index on page 83.

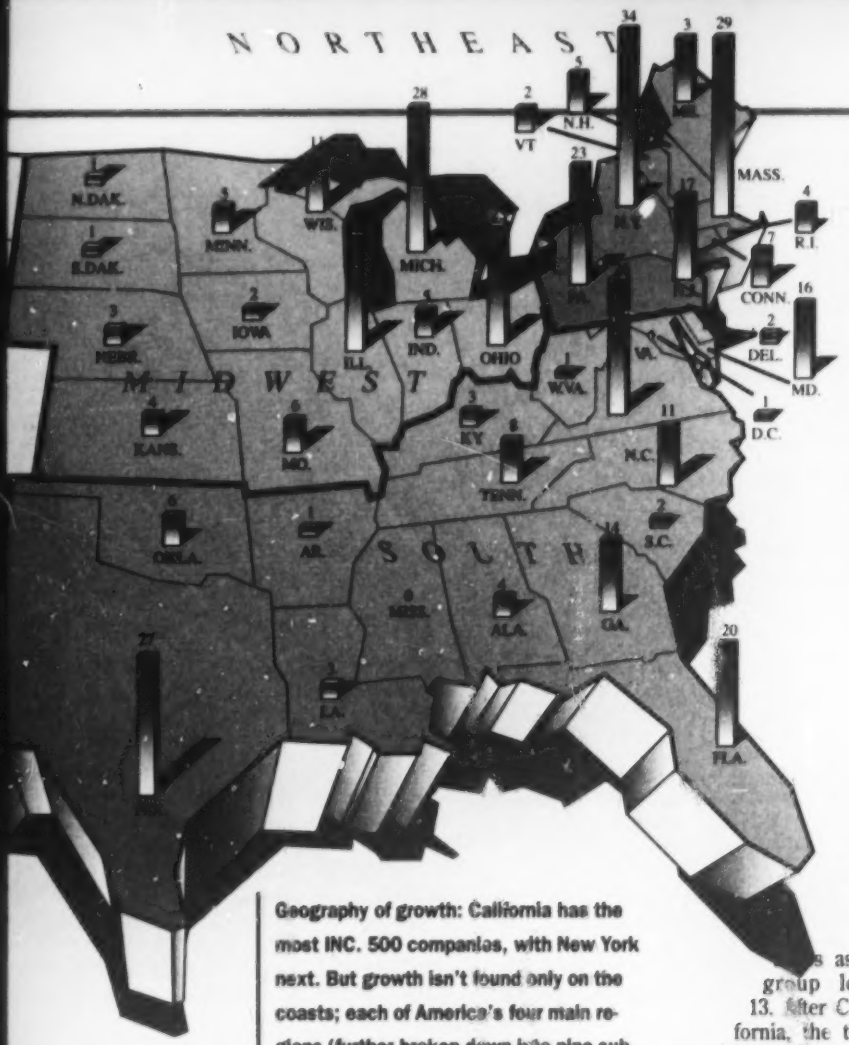
First, though, consider everything these 500 companies tell us about our new economy—and about where Eli Terry–like growth is taking place in modern America.

INC. 500: TOP 10 STATES BY POPULATION

(Companies per million residents)

1. Massachusetts	4.92
2. New Hampshire	4.61
3. Virginia	4.32
4. Rhode Island	4.03
5. Vermont	3.99
6. Maryland	3.48
7. Delaware	3.03
8. Michigan	3.03
9. California	2.93
10. New Mexico	2.85

MAPS: DALE GLASGOW



Geography of growth: California has the most INC. 500 companies, with New York next. But growth isn't found only on the coasts; each of America's four main regions (further broken down into nine subregions; see table, above right).

THE INC. 500: BY REGION

(Companies per region)

NEW ENGLAND	50
MIDDLE ATLANTIC	74
EAST NORTH CENTRAL	89
WEST NORTH CENTRAL	22
SOUTH ATLANTIC	93
EAST SOUTH CENTRAL	13
WEST SOUTH CENTRAL	37
MOUNTAIN	24
PACIFIC COAST	98

WHERE THE GROWTH IS: BY REGION

Point one: this is a big country, with booming growth appearing all over the map. Divide the United States into its four main sections—Northeast, Midwest, South, and West—and you'll find something approximating one-quarter of the list in each one. The South is the regional winner, with 145 companies. It's followed by the Northeast (124), the West (120), and the Midwest (111).

Over the past five years, however, both the South and the West have lost ground relative to the other two regions—which leads to some surprising conclusions about the geography of growth.

■ The hot coast these days is the Atlantic, not the Pacific. California is—as always—the single-state leader, with 83 companies, down 3 since our 1984 list. But New England, the Middle Atlantic states, and the South Atlantic states rack up 217, a gain of 12 over five years ago. New England alone gained 13 winners since 1984, while Pacific Coast as a group lost 13. After California, the two leading states are New York, with 34 companies, and Massachusetts, with 29.

■ Adjusting for population, the tilt toward the East becomes even more pronounced. Seven of the top 10 states are on the East Coast, while California drops to #9. Staid New England has half again as many winners per million residents as the Pacific Coast states. Going back to those four main regions, the Northeast is now the hands-down winner, with the South bringing up the rear.

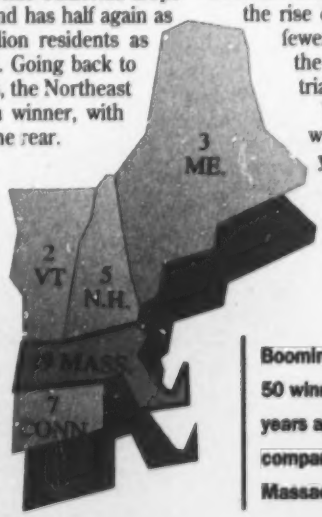
■ Something remarkable is happening in what used to be called the Rust Belt. Ohio, Indiana, Illinois, Michigan, and Wisconsin have 89 companies among them, up from 75 in 1984. Michigan alone added 18 listees in five years, including 6 since last year. "We're seeing a lot of spin-off activity from large corporations, both in manufacturing and services," says John E. Jackson, a professor at the University of Michigan who's an expert on the state's economy. "And the state government has been instrumental in supporting that kind of entrepreneurship."

Only a few states—Alaska, Mississippi, Montana, and Nevada—didn't make the list at all. Sparsely populated Wyoming made it for the first time in a few years, thanks to Moose's Welding & Construction (#368). Gardener's Supply (#310) and New England Builder (#463) put tiny Vermont on the list, also for the first time in a while. Maine has three INC. 500 companies this year; from 1983 through 1987 it had none at all.

WHERE THE GROWTH IS: BY SECTOR

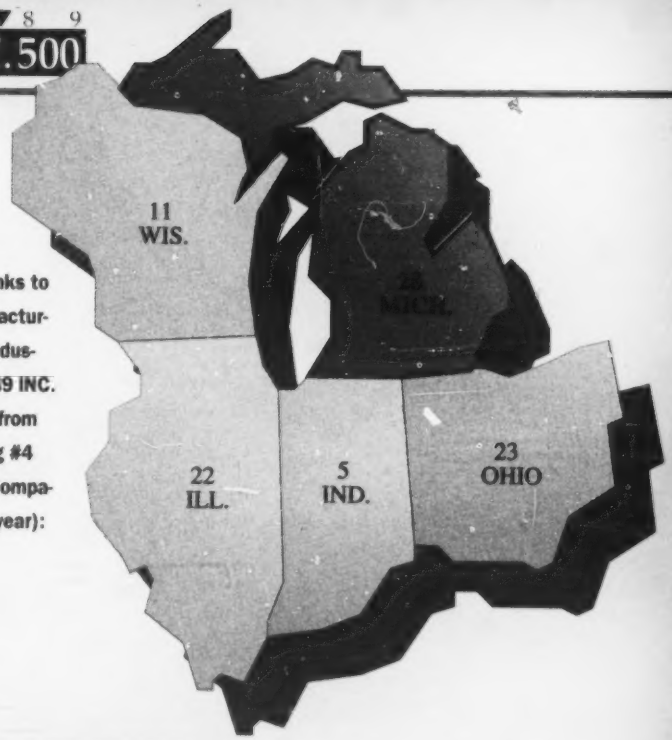
The economic story of the past decade—you can read about it in half a dozen books, not to mention magazines and newspapers—has been the decline of U.S. manufacturing and the rise of the service economy. Today fewer than one-fifth of workers in the United States are in the industrial sector.

Which doesn't exactly explain why 33%—one-third—of this year's INC. 500 companies are manufacturers, up from 26% a year ago and 24% two years ago. Run your eye over



Booming New England boasts 50 winners, up 13 from five years ago. The leader in companies per million residents: Massachusetts

THE INC. 500: BY SECTOR	
Service	41%
Manufacturing	33%
Retail	10%
Construction	8%
Distribution	8%



Rusty no more: Thanks to the revival of manufacturing, the five-state industrial heartland has 89 INC. 500 companies, up from 75 in 1984. Ranking #4 overall (and up six companies just since last year): Michigan

the list and you'll spot companies making auto accessories, data-communications equipment, model racing cars, composite panels, electronic motion controls, hazardous-waste containers, and dozens of other products, handcrafted and high tech, industrial and consumer.

What's going on here? In fact, the story of what is and is not made in America is more complex than it appears. For one thing, fast-growing companies are still pioneering in numerous technology-based fields. Venture Lighting International (#63) makes state-of-the-art metal-halide arc-discharge lamps. Modular Instruments (#143) makes sophisticated signal-processing recorders for medical research. Other microelectronics companies on the list turn out products as diverse as flight simulators and CAD/CAM systems as well as "ordinary" products such as computer peripherals and software.

Then too, aggressive U.S. entrepreneurs are learning to compete internationally. Quad Systems (#160) makes automated machinery for the manufacture of surface-mount printed circuit boards—and competes head-to-head with the big Japanese companies that first commercialized this new technology. Quad last year did more than one-third of its business overseas, mostly in Asia. In women's and children's clothing, an industry devastated by imports, David Alon Enterprises (#217) thrives by offering turnaround times foreign producers can't match.

On the face of it, there's not much news in the list's other sector divisions. Distribution and services are down a percentage point or two from last year, elbowed aside by the growth in manufacturing, while retailing is holding steady at 10% and construction at 8%. Even so, we sometimes wonder how much we have to bend reality to come up with any statistics at all.

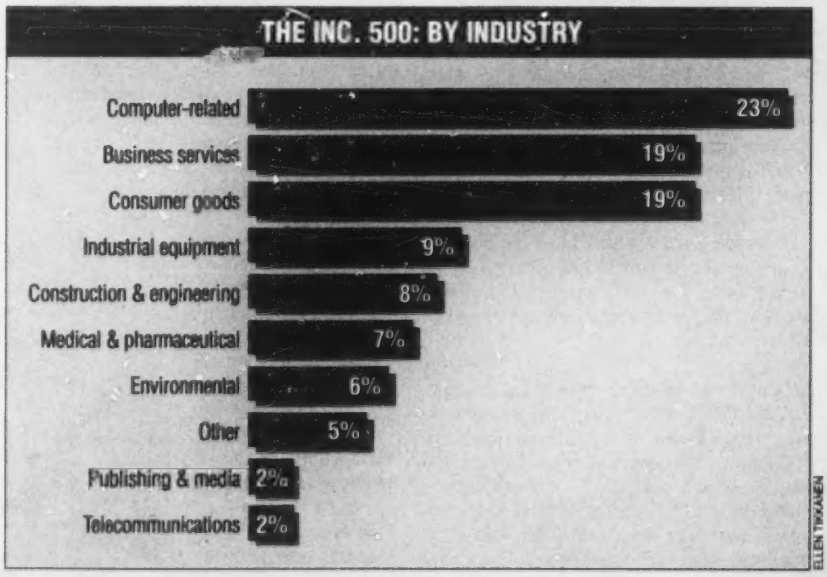
Take Phil Pachulski's Prime Technology (#329), in Grand Rapids. Prime is a dealer in machine tools, so it's counted under distribution. But Pachulski—who lets little grass grow under his feet—also manufactures specialty cutting tools and provides engineering services to clients needing help in systems design. Distribution? Manufacturing? Service? You tell us.

WHERE THE GROWTH IS: BY INDUSTRY

Think "fast growth" and your mind runs to glitzy technology companies, the Digital Equipments and Sun Microsystems of tomorrow. Indeed, nearly a quarter of our list this year is in the computer-related category—up from one-sixth five years ago—and there are plenty of high-tech businesses sprinkled through the list's other classifications. But the vast majority of INC. 500 companies don't depend on leading-edge science and engineering; they teach a different kind of lesson about where fast growth is to be found.

Big social changes bring big opportunities for growth. Take health care, which must be a candidate for fastest-changing industry in America. It has been a slippery slope for many businesses including some of the nation's largest hospital chains and insurance companies. But one company's slip is another's toehold: INC. 500 companies run health-care centers, provide diagnostic testing, sell data services to physicians, provide contract nursing, rent specialty medical equipment, manufacture electrocardiography instruments—the list goes on and on.

Or take the 29 environmental-protection companies on the list, which have been broken out into a separate category for the first time this year. While some businesses complain about all the new environmental regulations and requirements, others are, well, cleaning up. INC. 500 companies do everything



Perennial winner California is home to 83 listees. But West Coast states have lost ground to the East and Midwest.

from removing asbestos to monitoring agricultural pesticide residues.

More and more, ours is an economy of niches. Roadshow Services (#198) provides trucks and drivers for performers. Information America (#93) puts court records on-line so that lawyers can consult them instantly. Backroads Bicycle Touring (#331) markets van-supported bike tours. In the past, companies grew by offering standardized products to ever-wider markets. Today they grow by carving out smaller, more specialized niches—and filling them better than anyone else. The diversity is dazzling. If you could somehow shop at an INC. 500 mall, you could pick up Australian wines, model racing cars, archery equipment, and handcrafted embroidery. You could buy trendy hair-care products, watch a parent-education video, and nibble on some Italian fast food. (Frivolities? Maybe. So were clocks in Eli Terry's day. The farmers who bought from Terry's peddlers didn't need to know what time to milk the cows or when to turn on Cosby.)

There's "churning" even in the most mature of industries. Would you expect to find a distributor of tobacco and confectionery products on the INC. 500? What about a dealer in recreational vehicles? Yet there they are: printers and photographers, public-relations agencies and photocopying centers, all of them in run-of-the-mill businesses and all of them somehow growing much faster than their competitors.

If we compiled a list of all the companies that went broke last year, we'd find many such businesses on that list as well. Moral: growth is often where you make it, not just where you find it. Plenty of companies were selling toys before Toys 'R' Us came along. And metropolitan Cleveland had plenty of travel agencies before Cynthia Bender's Meridian Travel (#175) was born. Even so, Meridian grew from $625,000 to more than $10 million in five years.

THE AVERAGE COMPANY

Sales growth	1,407%
Sales (1988)	$15,013,456
Sales (1984)	$996,436
Employees (1988)	135
Employees (1984)	20
Productivity* (1988)	$111,211
Productivity* (1984)	$49,822

*Sales/employee

WHERE THE GROWTH IS: COMPANIES

Five years ago, the typical company on this year's list was the modern equivalent of Eli Terry's clockworks: 20 employees, less than $1 million in sales. A majority were at least modestly profitable even then, but more than one-third reported break-even or loss. Then the growth began.

Today the typical company registers more than $15 million in sales. That figures out to an average increase of 1,407% since 1984, or a 97% compound annual growth rate. It has 135 employees and sales per employee of more than $111,000. Profitability? Nearly 90% of this year's winners are making money, with almost 20% reporting profits of more than 11% of sales.

So much for averages. As with everything else relating to the INC. 500, the real interest is in the diversity. Despite the constraints of the list—$100,000 minimum sales five years ago, $25 million maximum—the differences are dramatic.

The fastest grower—#1—is Cogentrix, an owner and operator of energy cogeneration

THE INC. 500: AVERAGE COMPANIES BY SELECTED INDUSTRY

	BUSINESS SERVICE	COMPUTER RELATED	CONSUMER GOODS	MEDICAL/ PHARMACEUTICAL	ENVIRONMENTAL
Sales growth	1,066%	1,586%	1,147%	1,826%	2,774%
Sales (1988)	$10.3 million	$20.4 million	$11.3 million	$14.6 million	$34.7 million
Sales (1984)	$878,876	$1.2 million	$908,417	759,879	$1,207,482
Employees (1988)	108	111	197	251	143
Employees (1984)	13	16	33	45	15
Productivity* (1988)	$94,911	$183,429	$57,523	$58,318	$242,642
Productivity* (1984)	$67,606	$75,476	$27,528	$16,886	$80,499

* Sales/employee

facilities, up from 1984 sales of $134,000 to 1988 sales of nearly $130 million. Growth rate: 96,716% (see "Full Steam Ahead," page 78). Down at the bottom, Infotec Development grew a paltry 573%—61% a year, faster than most businesses *ever* grow—hitting more than $46 million in 1988 sales.

The revenue leader: American Central Gas (#12), last year's #1, with close to $325 million in sales. Seven other companies on the list registered more than $100 million in sales, taking them well beyond the realm where most people would consider them small. At the other extreme, tiny Tom Walz (#449) chalked up revenues of only $754,000. Yet Walz, which makes saw tips and does related metallurgical and medical research out of Tacoma, Wash., still hit a 654% growth rate.

This year's Most Employees award—if there were one—would go to Landmark Hotel (#330), in Topeka, which owns or leases and operates 23 hotels and six restaurants with 3,500 employees. Landmark is also the list's acquisition leader, with 29—which is 29 more than most INC. 500 companies recorded. (More than 400 companies made the list without a single acquisition.) The Fewest Employees award? Corporate Book Resources (#275) and Pauli's Discount Optics (#452), with one each. Corporate Book's Richard Weigen runs his business-oriented book-ordering service by subcontracting order fulfillment and other work. Frederick Pauli Jr. sells telescopes and other optical equipment with some volunteer help from his retired parents. "Hiring a second person is the death of entrepreneurial companies," says the cautious Pauli, "because the hired person can never be as committed as the founder is."

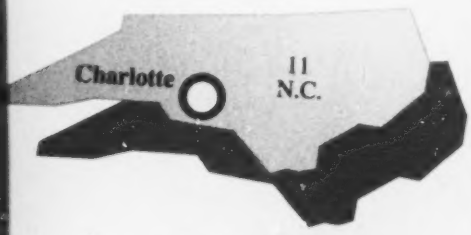
On average, the INC. 500 companies this year are 8.4 years old—not surprising, since they must be at least 5 years old to qualify, and those that are still small in the base year have a built-in advantage when growth rates are calculated. But if your company is older than that, don't give up. Draughon Training Institute (#388) was founded 98 years ago. CEO Terry Shultz's father bought the career school in 1972, and she took it over 10 years ago. The secret to Draughon's recent growth: "Relocation to a better area of town and an aggressive marketing campaign," says Shultz.

As 1989 comes to a close, the United States is winding up the seventh consecutive year of a growing economy; for most businesses in most parts of the country, times are still pretty good. But the story told by the INC. 500 isn't just of growth, it's of change. New technologies, new markets, new niches, and—as you'll see on the pages that follow—new ideas about how to run a company. You can grow along with the economy just by doing things the ordinary way. You make the 500 by doing something extraordinary.

Which, of course, is what clock maker Eli Terry did. You might even say he was ahead of his time. ❑

THE INC. 500: BY PROFITABILITY

(Aftertax income as a percentage of sales)	Base year 1984	Current year 1988
16% or more	11%	10%
11% to 15%	6%	9%
6% to 10%	16%	23%
1% to 5%	29%	46%
Break-even	6%	4%
Loss	32%	8%



Home of #1: Sales-growth leader Cogentrix—revenues of $130 million last year, only $134,000 five years ago—makes its home in Charlotte, N.C.

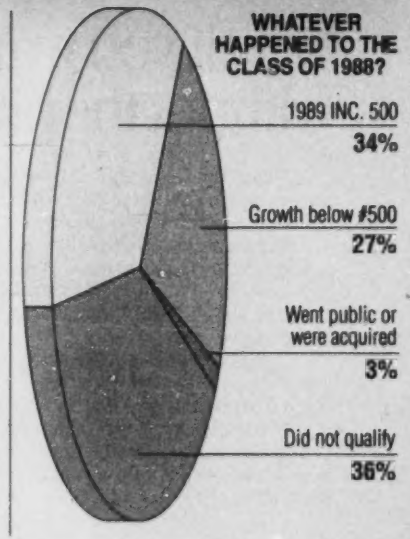
CLASS NOTES

It's hard enough to make the INC. 500 once, but some companies just keep coming back

Think of it as a game of musical chairs, with the tempo getting faster the longer you play. Say your company makes the INC. 500 one year. To make it the next year, you also have to grow at breakneck speed—but from a new, higher starting point. That's why roughly two-thirds of any year's winners don't appear on the next year's list. Granted, many companies don't qualify for other reasons, such as a decline in sales. But plenty keep on growing at a good clip, just not quite fast enough.

That built-in obstacle makes it all the more amazing that some companies turn up on the INC. 500 year after year after year. On the 1989 list: 37 three-time repeaters and 15 four-time repeaters plus—yes, you're reading this right—2 six-time winners. Who are these virtuosos of growth? Encore Marketing International (#312) markets the Encore travel card to consumers and businesses; the company's chart goes straight upward, from $123,000 in sales and 6 employees in 1979 (when it was called American Leisure Industries) to nearly $70 million and 900 employees last year. The ERM Group (#411), an environmental-services consulting firm, is up from $318,000 and 8 employees in 1978 to $117 million and 910 employees last year. ERM fell off the list once, in 1986; even then, though, it was still growing.

Anyway, here's a two-word secret to winning that game of musical chairs: forget growth. "Our objective isn't to obtain high growth but to be the best in the business and have a good time doing it," says ERM chief executive Paul Woodruff. "Growth is the result, not the goal."



THE 500 INDEX

Accutest Laboratories (383)
Acoustic Imaging Technologies (295)
AC3 (416)
Action Systems Technologies (210)
Active Parenting (243)
Addtemps/J.M. Peters (287)
Adept Technology (4)
Advanced Computer Concepts (301)
Advanced Energy Industries (386)
Advanced Entry Systems (142)
Advanced Network Design (433)
Advanced Sciences (274)
Advanced Systems Concepts (441)
Advent Software (219)
All Gulf Contractors (405)
Allied Computer Group (192)
Allservice Foods (308)
Alpha Computers (248)
Ambitech Design Services (128)
American Central Gas (12)
American Fabricating (283)
American Marketing Works (36)
American Medical Imaging (10)
American Oil Change (100)
American Rug Craftsmen (237)
Analytical Medical Enterprises (75)
Anderson Soft-Teach (355)
Applied Energy Services (126)
Aquidneck Management Associates (491)
Archery Center International (151)
Arena & Co. (42)
Arizona Freight Systems (439)
Arnet (52)
Aromatique (162)
Arrowhead Landscaping & Maintenance (254)
Artisoft (39)
Attronica Computers (55)
Auburn Merchandise Distributors (59)
Australian Wines (353)
Automation At Work (425)
Automotive Caliper Exchange (146)
Backroads Bicycle Touring (331)
Badger Products (400)
Barakat, Howard & Chamberlin (181)
Beckett (266)
Belkin Components (374)
Bertucci's (72)
Best Cuts (453)
Best Mailing Lists (334)
Bio-Diagnostics Laboratories (498)
Bohdan Associates (168)
BSE Management (149)
BTG (393)
B2A Consultants/Survsat (427)
Bubbling Bath Spa & Tub Works (340)
Buccino & Associates (147)
Bulk International (171)
Burdco Environmental (322)
Burnham Broadcasting (82)
Bushman Press (7)
Caber Systems (412)
Cable Photo Systems (218)
Cadmus Group (164)
Cape Fear Insulation (115)
Capricorn Systems International (317)
CareerTrack (398)
Carpenter HealthCare Systems (31)
Carts of Colorado (431)
C-Cubed (318)
CEBCOR (3)
Celebrity (495)
Cell-Con (348)
Cellular Service (101)
Cencom Cable Associates (60)
Central Coast Analytical Services (204)
Century Computer Marketing (78)
Certified Engineering & Testing (226)
Cexec (379)
C.G. Enterprises (131)
Champion Mortgage (109)
Charing (225)
Chariot Eagle (51)
Chemical Technologies (352)
Chico's (69)
Circle K RV's (257)
CitiCam Video Services (120)
City Sports (270)
C. Kirk Steele Insurance Services (486)
Claren Business Centers (154)
Classic Graphics (479)
Clinical Medical Equipment (223)
Coddbarrett Associates (315)
Cogentrix (1)
Colonel's (129)
Colter Bay International (176)
Comark (444)
Communications International (170)
CompuAdd (104)
Compuclassics (241)
Compu-Link (105)
Computer Managers (435)
Computer Media Technology (134)
Computer People Unlimited (211)
ComputerTech Integrators (492)
Comstock Creations (385)
Comsys Technical Services (381)
Concept Omega (68)
Consolidated Planning (357)
Construction Technology (367)
Continental Financial Resources (375)
Core International (294)
Corporate Book Resources (275)
Corporate Resource Associates (209)
Cosmopolitan Travel (366)
Cowan (144)
Creative BioMolecules (333)
Creative Designs (107)
CText (269)
Curran Construction (440)
Custom Living Homes & Communities (205)
Custom Property Management (390)
Dash, Straus & Goodhue (392)
Datasec (437)
Data Source Media (313)
David Alan Enterprises (217)
Del Paso Pipe & Steel (481)
Devon Direct Marketing & Advertising (6)
Devtron, Russell (238)
Dialogic Communications (320)
Diamon Images (92)
DIANON Systems (16)
DiGesare Mechanical (292)
Distribution Analysis Research & Tech. (299)
DMC Construction (252)
Donaldson & Co. (196)
Dore & Associates Contracting (256)
Draughon Training Institute (388)
D.D.F. Transportation (174)
Eaglebrook Plastics (178)
East Coast Auto Rental (422)
East Coast Computer Systems (110)
Eastern Marine Construction (232)
Echo Data Services (350)
Educational & Fun (343)
Electronic Liquid Fillers (267)
Electrotek Concepts (234)
Elkins Constructors (224)
EMS (24)
Encore Marketing International (312)
Endless Vacation Travel (496)
Energy Fuels Development (28)
Enreco (236)
Enterprise Builders (395)
ERM Group (411)
Esco Energy (48)
EVI (278)
Executive Software (33)
Express Services (97)
Exsel (222)
Factor, Fox & Associates (247)
Falcon Microsystems (207)
FG*I (95)
FiberCom (456)
Financial Supermarkets (150)
1st American Rental Center (420)
First Intercontinental (324)
Florida Fulfillment (189)
Forecast Mortgage (391)
Forms Direct (345)
Formu-3 International (14)
Francioli, Richartz, Werman & Fiss (145)
Frontier Engineering (456)
Full Line Foods (370)
Future Now (476)
Gainey Transportation Services (11)
Galison Books (473)
GammaLink (65)
Gardener's Supply (310)
Gary A. Taylor Construction (384)
Gateway Design Automation (183)
Generic Business Solutions (152)
Georgia Mountain Water (332)
Geoscience Consultants (169)
Gerber Alley (483)
Ghafari Associates (485)
Glazen Communications (480)
Glenn M. Gelman & Associates (404)
G.O.D. (397)
Government Technology Services (155)
Grant Wood Specialties (122)
Greater Alarm (258)
Greenleaf Health Systems (289)
Green Thumb Enterprises (316)
Group Benefit Services (302)
Hall-Kimbrell Environmental Services (9)
Hansen (260)
Harris Foods (116)
Harvest (135)
HAZCO Services (40)
HazMat Environmental Group (339)
Health Care Associates (326)
HealthStaffers (98)
Holcomb International (459)
Henley International (268)
Hertzberg Rare Coin Investments (29)
HME Construction (43)
H&M Food Systems (233)
Holiday Builders (103)
Home Grown Woods (253)
Horizon Data (87)
Hospital Correspondence Copiers (106)
Hudson Valley Tree (387)
Hydro Services (271)
ICT Technologies (91)
Ideal Computer Services (389)
IG Systems (273)
Illini Technology (293)
IMRS (213)
Industrial Restorations (489)
InfoCision Management (61)
Information America (93)
Information Technologies (466)
INFOTEC Development (500)
Integrated Systems Control (244)
Interactive Learning Systems (421)
Inter-ad (235)
Interay International X-Ray Tube (193)
International EPDM Rubber Roofing (102)
International Galleries (376)
Internet Systems (50)
Jandel Scientific (216)
Janet Sand & Gravel (89)
JasTech (114)
J.B. Conwell Contracting (229)
Jamson Cabinetry (432)
Jenny Craig (448)
John Paul Mitchell Systems (279)
J.P. Rhoades Development (37)
Kalamazoo Banner Works (141)
Kaminari (249)
Kamfil Distribution (57)
KETIV Technologies (121)
Kidwell Construction (206)
KTI (13)
Landair Transport (443)
Landmark Hotel (330)
Landmark Systems (138)
Landscapes Unlimited (246)
Larsen Engineers (284)
Lautek (17)
Leather Center (290)
Lebrecht Stephenson & Hagan (417)
Lee Agency (445)
Leopardo Construction (351)
Leros Point to Point (194)
Lester Telemarketing (264)
Life Design Systems (347)
Lincoln Scenic Studios (297)
Lion Coffee (447)
Little & Co. (321)
Lusaic International (5)
Logical Operations (127)
Logicraft (377)
Logistic Systems Architects (25)
Loredan Biomedical (41)
Louisiana Business College of Monroe (364)
Made in France (363)
Management Research Group (307)
Mangano (71)
Mantles (410)
March-Westin (133)
Maresco International (484)
Martin-Logan (156)
Maryland Health & Fitness (161)
McClanahan & Co. (380)
McDATA (94)
McLennan & Thebault (396)
MD&A Group (429)
MediQual Systems (77)
MediVision (35)
MEDLINC (21)
Melannco International (123)
Mercury Computer Systems (18)
Meridian Travel (175)
Mesa Products (117)
MetroCareers (159)
Metro Computing (34)
Microcomputer Power (148)
Microdynamics (282)
Micrografx (430)
Micron Separations (457)
MicroProse Software (346)
Microsolutions (182)
Mid-Atlantic Medical Services (139)
Mid Atlantic Storage Systems (166)
Midwest Publishing (438)
Midwest Wood Treating (99)
Military Communications Center (81)
Minker Construction (251)
M. Lavine Design Workshop (471)
Mobile Technology (64)
Modern Technologies (53)
Modular Instruments (143)
Molly Maid (424)
Moose's Welding & Construction (368)
Mortara Instrument (227)
MRPS (407)
Mrs. Hall's Cookies (314)
Mr. Trees (408)
Myers-Holum (469)
NAC (19)
National Business Institute (487)
National Communications (478)
National Data Products (190)
National Engineering Service (111)
National Investigative Services (125)
National Nurses Service (359)
National Safety Associates (62)
Nationwide Vending Services (195)
NCO Financial Systems (245)
Neogen (46)
Network Controls International (255)
New Boston Associates (419)
New England Builder (463)
New Methods Research (140)
N.H.S. (214)
Northern Lights Enterprises (482)
Northgate Computer Systems (58)
NSS (85)
Ocean State Coordinated Health Svcs. (2)
OE Automation (477)
Oldenburg Group (20)
Olympic Temporary Services (242)
Omnicomp Graphics (137)
Orbital Sciences (112)
Orchard Computer (291)
Original Copy Centers (401)
ORMEC Systems (460)
Oscor Medical (304)
OSP Consultants (8)
Ovation Marketing (446)
Pacific Biotech (136)
Packaging Resources (323)
Parencorp (327)
Paris Gourmet (179)
Park Cardiographics (229)
Paul's Discount Optics (452)
Paul Sebastian (228)
PC Warehouse (450)
Pearl's Kitchen (220)
Pentz Design Pattern & Foundry (215)
Pepco Extruded Products (372)
Persona (409)
Peter Norton Computing (201)
Philly's Finest (73)
Phoenix Process Equipment (380)
Phone Bank Systems (455)
Planning Analysis (465)
Plow & Hearth (454)
Power Resources Operating (158)
PPOM (76)
Practice Management Systems (369)
Prestige Leather Creations (272)
Pretty Punch Shoppettes (240)
Pride Transport (426)
Prime Technology (329)
Princeton Review (263)
Professional Business Schools (49)
Progress Software (38)
Progressive Peripherals & Software (88)
Progressive Ribbon (202)
Project Development Group (32)
Promar (462)
Pro-tech Industries (468)
Proteon (296)
Public Interest Affiliates (311)
Pyraponic Industries (86)
Qosina (499)
Quad Systems (160)
Quality "S" Manufacturing (486)
Quicksilver Express Courier (286)
Quintron (44)
RailTex (464)
Read (96)
Real World Systems (180)
Reliable Mechanical (298)
Renaissance Investment Mgmt. (423)
Research Analysis & Maintenance (436)
RESOLUTE Building (165)
Resource Conservation Services (157)
Revelation Technologies (26)
RHS Fertilizing/Spraying Systems (305)
Rippey (250)
Rizzo Associates (188)
RJE Communications (475)
RJO Enterprises (80)
RMI Resource Management (186)
Roadshow Services (198)
Rocktron (197)
Routing Technology Software (177)
Royal Cabinets (361)
Royal Plans (378)
RPM Rent A Car (84)
RPR & Associates (342)
Rue de France (336)
Russell Construction (338)
Russell Personnel Services (184)
R.W. Lynch (67)
Salem Screen Printers (262)
Sampler Publishing (27)
Sardo (406)
SBT (221)
Scantique (212)
Schubert Environmental Equipment (354)
Scioto Valley Hot Tubs & Spas (493)
S. Cohen & Associates (265)
Seatec (185)
Seed Research of Oregon (418)
Senior Living Centers (83)
Serrot (362)
Shawmut Design & Construction (191)
Silton-Bookman Systems (365)
Simmons Communications (403)
SIR Group (200)
Skoda, Minotti, Reeves (358)
Smart (325)
Softa Group (497)
Softmart (23)
Software Alternatives (335)
Software Associates (45)
Software Spectrum (56)
Software 2000 (208)
Soltech (467)
Source Window Coverings (124)
Southwest Royalties (172)
Staff Control (281)
StarPak (90)
Statistica (70)
STAT Medical Services (303)
Stead-Systems (163)
Step Ahead Investments (79)
Sterling Management Systems (119)
Stockpot Soups (306)
Sunday River Skiway (328)
Sunglass Distributors (413)
Sunny Waterbeds & Accessories (394)
Sunsoft (414)
Superpumper (494)
Super Wash (280)
SYME (399)
Symplex Communications (470)
Syracuse Newtimes Newspaper (259)
Syscomm International (319)
TAMSCO (22)
Tarason Labels (153)
Team Food Management (402)
Technatics (300)
Telco Communications (132)
Teledial America (349)
T.G. Bauer Associates (277)
TME (54)
Tom Welz (449)
Trailco Leasing (356)
Transamerica Energy Associates (203)
Traveling Software (30)
Trinity Products (74)
Unique Transportation Systems (337)
Universal Computer (461)
U-Save Auto Rental of America (382)
U.S. Landscape (371)
U S Realty Associates (344)
Vanderveer Group (474)
Vanguard Research (276)
Venture Communications International (309)
Venture Graphics (288)
Venture Lighting International (63)
VHP (442)
Viking Engineering (415)
Villa Enterprises (434)
Vitalic (15)
Vitronix (108)
Wahoo! Boats Unlimited (167)
Walker Richer & Quinn (230)
Walton Manufacturing & Rebuilding (451)
Wang Associates Public Relations (261)
Weathashade (231)
Welcom Software Technology (47)
Wellex (173)
Wellness & Lifestyle (187)
Wesson, Taylor, Wells & Associates (130)
Western Nugget Transport (113)
White Pine (373)
Wilson Sculley Associates (285)
Windline Amanet (428)
WordPerfect (118)
Wright Travel (490)
wTe (199)
XA Systems (66)
Xyquad (341)
Your Staff (472)

PETER VOOR

John Lau
Lautek Corp.
Sells computers to corporations

GROWING UP

Mother Teacher, garment factory worker
Father Salesman, waiter in Chinese restaurant
Hometowns Hong Kong; New York City's Chinatown
Education M.S. physics
Jobs Vice-president of global data network at Shearson/American Express

GETTING HERE

"I had a lot of ideas in my mind, and I wanted to do them much faster than my management, so I decided, hey, I really need to do things on my own. So I started Lautek in the basement of my house."

MY COMPANY, MY SELF

Inspiration "It seems I have no choice. To drive as much as possible is part of my inner self."
Family in Business Wife, cofounder and VP; brother-in-law, chairman
What's Changed "When I talk to end users—or sometimes to purchasing people—they don't see me as the regular white-man majority. That continues today. It's not frustrating, just part of life."
Lose Sleep Over Cash flow
Workweek 75 hours
Last Vacation Haven't taken a week since starting company
Use a PC Yes
What's Next May go public

FOOTNOTE

"There's so much I can do; looking back at things, I could have done so much better. In work and life, too. But there's no use in looking back. I've liked the momentum. There was nothing, then something was created—something to the best of my ability. That's probably the driving force."

THE 500

1.	**Cogentrix** Charlotte, NC Owns & operates cogeneration facilities	96,716%	$129,734	$134	D	F	365	12	1983
2.	**Ocean State Coordinated Health Svcs.** Warwick, RI Provides cost-managed health-care svcs.	45,581	82,682	181	D	A	133	20	1979
3.	**CEBCOR** (13) Chicago, IL Provides employee leasing svcs.	20,803	25,083	120	D	D	49	3	1983
4.	**Adept Technology** (8) San Jose, CA Mfrs. industrial robots	15,471	30,831	198	E	F	251	46	1983
5.	**Lluski International** Melville, NY Distr. computers & accessories	15,420	68,133	439	D	E	150	5	1984
6.	**Devon Direct Marketing & Advertising** Malvern, PA Provides advertising svcs.	11,974	45,277	375	B	A	46	3	1983
7.	**Bushman Press** (36) Provo, UT Provides commercial printing svcs.	11,223	17,437	154	A	A	300	10	1982
8.	**OSP Consultants** Sterling, VA Provides telecomm., engineering, & construction svcs.	10,981	11,857	107	B	A	304	3	1984
9.	**Hall-Kimbrell Environ. Services** (34) Lawrence, KS Provides environmental engineering & testing svcs.	10,774	44,476	409	A	C	700	5	1982
10.	**American Medical Imaging** Horsham, PA Provides diagnostic ultrasound testing svcs.	10,573	11,100	104	D	F	184	3	1984
11.	**Gainey Transportation Services** Grand Rapids, MI Provides long-haul, dry-van trucking svcs.	10,455	15,938	151	D	F	197	3	1984
12.	**American Central Gas** (1) Tulsa, OK Gathers, processes, treats, & mkts. natural gas	10,255	324,309	3,132	D	C	109	8	1983
13.	**KTI** (43) Guttenberg, NJ Develops alternative energy sources	9,143	22,923	248	F	F	135	4	1982
14.	**Fermo-3 International** Canton, OH Operates weight-control facilities	9,106	14,730	160	A	A	100	25	1982
15.	**Vitelic** San Jose, CA Supplies semiconductor memory	8,894	39,935	444	A	F	220	27	1983
16.	**DIANON Systems** Stratford, CT Provides products & data svcs. to physicians	8,434	11,947	140	C	F	120	35	1983
17.	**Lautek** Somerset, NJ Sells personal computers	8,264	42,993	514	D	D	139	7	1983
18.	**Mercury Computer Systems** Lowell, MA Produces processors for computer applications	7,995	11,818	146	C	F	103	17	1983
19.	**NAC** Richardson, TX Mfrs. intelligent network platforms	7,652	26,745	345	A	F	147	16	1984
20.	**Oldenburg Group** (172) Milwaukee, WI Mfrs. diversified products	7,622	90,969	1,178	C	C	860	17	1943
21.	**MEDLINC** New York, NY Provides home health-care svcs.	7,177	12,080	166	D	B	73	6	1984
22.	**TAMSCO** Calverton, MD Develops software & engineering support systs.	7,103	13,542	188	D	A	256	12	1982
23.	**Softmart** (3) Exton, PA Resells microcomputer software & peripherals	7,099	44,560	619	D	F	125	14	1982
24.	**EMS** Phoenix, AZ Remfrs. electrical & mechanical equipment	6,949	9,164	130	D	F	90	3	1984
25.	**Logistic Systems Architects** Sacramento, CA Provides logistic mgmt. & planning svcs.	6,512	15,802	239	D	F	324	12	1983

ANDREW BAUER
#35

Eric Kriss
MediVision Inc.
Operates 30 eye health-care centers

GROWING UP

Mother Marriage counselor
Father Physician and professor
Hometown Palo Alto, Calif.
Education B.A. music, M.B.A.
Jobs Started a music magazine; wrote music books; editor at a weaving magazine; consultant at Bain & Co. and cofounded Bain's VC arm

GETTING HERE

"Bain studied this business for Bausch & Lomb, which decided not to pursue it; I was at Bain Capital, read the business plan we put together—which now had no company behind it—and decided to buy the idea from Bausch."

MY COMPANY, MY SELF

Inspiration Ben Franklin—his balanced approach to life
Family in Business None
What's Changed "We spent the first two years intensely following competitive developments, organizing a strategy to make it more difficult for competitors to enter. I'm not concerned about that anymore. If a company started next week it wouldn't bother me."
Lose Sleep Over Government regulations, especially Medicare reimbursement
Workweek 50 hours
Last Vacation "I don't think I've taken two consecutive weeks off since eighth grade."
Use a PC Yes, and also at home
What's Next Have plans to sell company by the end of the year

FOOTNOTE

"I'm not a workaholic. I never work on weekends or at night. I always spend time with the family. I'm amazed at people who say they work 16 hours a day, because you know what? I think I've probably got 4 or 5 good hours a day."

26.	**Revelation Technologies** New York, NY Supplies database mgmt. systs.	6,306%	$9,353	$146	D	C	105	3	1983
27.	**Sampler Publishing** St. Charles, IL Provides publishing svcs.	6,266	7,257	114	A	E	20	2	1984
28.	**Energy Fuels Development** Portales, NM Mfrs. & sells ethanol & related products	6,206	19,927	316	F	D	59	3	1982
29.	**Hertzberg Rare Coin Investments** Tacoma, WA Buys & sells rare U.S. coins	5,976	6,076	100	D	C	6	1	1984
30.	**Traveling Software** Bothell, WA Develops microcomputer software	5,930	6,090	101	B	F	55	10	1983
31.	**Carpenter HealthCare Systems** Maryland Heights, MO Provides health-care mkt. & mgmt. svcs.	5,825	6,043	102	D	F	110	3	1984
32.	**Project Development Group** Pittsburgh, PA Provides asbestos-abatement svcs.	5,758	11,072	189	C	F	150	5	1984
33.	**Executive Software** Glendale, CA Develo, & mkts. syst. software	5,653	6,041	105	C	A	50	2	1981
34.	**Metro Computing** Troy, MI Remkts. computer systs. & software products	5,468	24,333	437	D	C	25	12	1976
35.	**MediVision** Boston, MA Operates vision health-care centers	5,335	50,163	923	D	F	500	7	1984
36.	**American Marketing Works** Gardena, CA Mfrs. & licenses clothing	5,177	43,116	817	B	C	275	15	1984
37.	**J.P. Rhodes Development** (21) Santa Ana, CA Develops real estate; builds houses	5,138	34,047	650	C	C	18	18	1982
38.	**Progress Software** Bedford, MA Develops & mkts. database mgmt. systs.	5,093	15,371	296	C	F	160	22	1981
39.	**Artisoft** Tucson, AZ Develops & mkts. hardware & software	5,092	6,750	130	A	F	40	1	1982
40.	**HAZCO Services** Dayton, OH Supplies hazardous-waste cleanup products	4,843	6,327	128	C	A	27	3	1981
41.	**Loredan Biomedical** Davis, CA Mfrs. diagnostic & therapeutic equipment	4,617	15,095	320	D	F	69	2	1984
42.	**Arena & Co.** Wallingford, PA Provides construction & design mgmt. svcs.	4,561	19,623	421	C	C	40	7	1981
43.	**HME Construction** Opelika, AL Provides asbestos-abatement svcs.	4,307	7,756	176	D	D	65	12	1983
44.	**Quintron** Chantilly, VA Designs & mfrs. flight simulators	4,213	13,587	315	D	F	170	8	1984
45.	**Software Associates** Emmaus, PA Integrates computer systs.	4,150	9,434	222	D	F	35	2	1984
46.	**Noogen** Lansing, MI Develops agricultural residue-control products	4,108	4,797	114	F	F	85	6	1982
47.	**Wolcom Software Technology** Houston, TX Mfrs. project mgmt. software	4,009	4,191	102	C	D	23	2	1984
48.	**Esco Energy** Tulsa, OK Explores, produces, & transports natural gas	3,998	144,319	3,522	D	A	76	25	1981
49.	**Professional Business Schools** (234) St. Louis, MO Operates private vocational schools	3,937	5,853	145	D	F	233	12	1976
50.	**Internet Systems** Chicago, IL Develops & mkts. computer software applications	3,907	10,619	265	F	F	110	53	1981
51.	**Chariot Eagle** Ocala, FL Mfrs. RV park & vacation homes	3,901	10,522	263	D	F	89	13	1984
52.	**Arnet** Nashville, TN Mfrs. microcomputers and peripherals	3,874	7,154	180	B	F	45	6	1983
53.	**Modern Technologies** Dayton, OH Provides technical svcs.	3,860	8,038	203	C	A	130	1	1984
54.	**TME** Houston, TX Develops & manages outpatient diagnostic clinics	3,788	6,532	168	D	B	76	1	1983
55.	**Attronica Computers** Washington, DC Sells computer products	3,766	8,118	210	F	F	32	2	1983
56.	**Software Spectrum** (15) Dallas, TX Resells microcomputer software	3,765	58,783	1,521	D	D	110	7	1983
57.	**Kenfil Distribution** (107) Van Nuys, CA Distr. microcomputer software	3,725	71,754	1,876	D	D	82	39	1983
58.	**Northgate Computer Systems** Plymouth, MN Assembles & sells personal computers	3,724	31,966	836	C	D	246	7	1983
59.	**Auburn Merchandise Distributors** Auburn, MA Distr. tobacco & confectionary products	3,642	35,512	949	D	D	86	6	1984
60.	**Cencom Cable Associates** (362) Chesterfield, MO Manages cable-TV systs.	3,565	42,914	1,171	F	C	407	25	1982

PETER VOOR

#74

Ernest Provetti
Trinity Products Inc.
Manufacturer of motors for model racing cars

GROWING UP

Mother Homemaker
Father Longshoreman
Hometown Brooklyn, N.Y.
Education B.A. philosophy; seminary student
Jobs Catering, rental car agency

GETTING HERE

"Building engines was just something to subsidize my own hobby. I didn't expect to make a living at it. Eventually I talked my mother into letting me pull the furniture out of the house, and I built a factory in our apartment. My mother still lives in Brooklyn—with furniture."

MY COMPANY, MY SELF

Inspiration Donald Trump. "I'd give up half my net worth to have lunch with him."
Family in Business None
What's Changed "What mattered back then was ego. It was driving me just to win the race. Now, I read everything I can get my hands on to learn about business."
Lose Sleep Over Wondering when the racing fad will fade
Workweek 50 hours
Last Vacation September '88, to Florida and Hawaii. "My first vacation in six years."
Use a PC Yes, a laptop
What's Next Opening a nightclub/restaurant in New York City

FOOTNOTE

"I took theology, philosophy, Greek, and Latin for 12 years; I didn't know *The Wall Street Journal* from a third-grade catechism. And today I hooked up my laptop into CompuServe so I could check my stock quotes. If someone had told me a few years ago that I'd be checking a few hundred thousand dollars of stock prices, I would have said you're crazy."

61.	**InfoCision Management** Akron, OH Provides direct-mkt. svcs.	3,557%	$6,785	$185	A	F	202	3	1982
62.	**National Safety Associates** Memphis, TN Mfrs. & sells water-filtration products	3,420	74,404	2,114	D	F	267	35	1970
63.	**Venture Lighting International** Solon, OH Mfrs. & sells state-of-the-art lamps	3,402	33,972	970	E	F	660	143	1983
64.	**Mobile Technology** (74) Los Angeles, CA Provides medical, diagnostic, & treatment svcs.	3,361	51,015	1,474	C	F	425	15	1983
65.	**GammaLink** Palo Alto, CA Provides PC-facsimile communications svcs.	3,330	3,602	105	C	F	38	3	1984
66.	**XA Systems** Los Gatos, CA Develops & mkts. software	3,311	13,100	384	B	F	115	16	1982
67.	**R.W. Lynch** San Ramon, CA Provides marketing svcs.	3,263	8,106	241	D	F	48	6	1984
68.	**Concept Omega** (20) Somerset, NJ Develops computer software	3,236	12,978	389	D	F	114	12	1982
69.	**Chico's** Fort Myers, FL Sells women's clothing	3,204	6,244	189	A	C	90	4	1983
70.	**Statistica** (27) Clarksville, MD Provides systs. & software engineering svcs.	3,176	12,284	375	D	F	180	6	1977
71.	**Mangano Co.** Visalia, CA Develops real estate; provides construction svcs.	3,162	15,820	485	B	F	25	2	1978
72.	**Bertucci's** (157) Woburn, MA Operates restaurant chain	3,157	11,400	350	B	F	200	10	1981
73.	**Philly's Finest** Tucson, AZ Owns & franchises Philly's Finest restaurants	3,079	3,370	106	F	F	255	17	1984
74.	**Trinity Products** Linden, NJ Mfrs. & distr. model racing cars	3,064	6,930	219	D	D	28	2	1983
75.	**Analytical Medical Enterprises** Baton Rouge, LA Provides contract nursing svcs.	3,060	6,098	193	D	D	130	5	1983
76.	**PPOM** Southfield, MI Provides alternative health-care delivery systs.	3,016	3,147	101	D	F	40	2	1984
77.	**MediQual Systems** (57) Westboro, MA Provides health-care database svcs.	2,963	9,525	311	C	F	121	15	1980
78.	**Century Computer Marketing** Marina Del Rey, CA Distr. used & refurbished computer peripherals	2,837	17,592	599	C	B	125	1	1984
79.	**Step Ahead Investments** West Sacramento, CA Operates surplus variety retail stores	2,823	6,518	223	D	F	110	3	1983
80.	**RJO Enterprises** (56) Lanham, MD Provides systs. engineering svcs.	2,792	50,239	1,737	D	D	515	52	1979
81.	**Military Communications Center** Eden Prairie, MN Resells telecommunications svcs.	2,738	16,629	586	F	F	125	10	1983
82.	**Burnham Broadcasting** Chicago, IL Operates network TV stations	2,732	48,290	1,705	F	F	517	100	1983
83.	**Senior Living Centers** Pittsburgh, PA Provides long-term care for elderly	2,717	4,395	156	A	F	300	50	1984
84.	**RPM Rent A Car** (340) Inglewood, CA Provides auto- & truck-rental svcs.	2,692	10,916	391	C	C	214	12	1982
85.	**NSS** Bedford, NH Supplies branch automation systs.	2,687	14,799	531	D	B	57	8	1983
86.	**Pyraponic Industries** San Diego, CA Sells botanical growth chambers	2,642	10,528	384	A	A	52	1	1982
87.	**Horizon Data** Herndon, VA Provides syst. integration svcs.	2,621	2,775	102	D	F	38	2	1983
88.	**Progressive Peripherals & Software** Denver, CO Mfrs. & sells personal computers	2,604	5,138	190	C	D	30	7	1983
89.	**Janet Sand & Gravel** Midland, MI Produces & sells asphalt, sand, & gravel	2,598	2,995	111	D	D	29	8	1983
90.	**StarPak** Denver, CO Mfrs. software	2,591	3,579	133	D	C	81	1	1978
91.	**ICT Technologies** Redwood City, CA Distr. computer graphics hardware	2,589	15,782	587	D	D	25	5	1983
92.	**Diamon Images** Los Gatos, CA Provides electron-beam-generated photo masks	2,514	4,340	166	B	F	18	3	1983
93.	**Information America** Atlanta, GA Provides on-line public record information & svcs.	2,485	7,876	307	F	F	77	20	1982
94.	**MeDATA** Broomfield, CO Mfrs. & mkts. network communications systs.	2,464	56,380	2,160	C	F	323	44	1982
95.	**FGI** (68) Chapel Hill, NC Provides mkt. products & svcs.	2,441	10,368	408	D	D	88	6	1982

96.	**Read (109)** Middleboro, MA Mfrs. gravel-screening equipment	2,435%	$29,148	$1,150	C	C	225	35	1980
97.	**Express Services (9)** Oklahoma City, OK Franchises permanent- & temporary-help svcs.	2,378	82,766	3,340	D	E	50	12	1983
98.	**HealthStaffers (62)** Chicago, IL Provides nursing svcs.	2,364	5,593	227	A	F	241	5	1977
99.	**Midwest Wood Treating** Norwalk, OH Mfrs. fire-retardant & rot-resistant lumber	2,333	7,857	323	D	D	25	4	1983
100.	**American Oil Change** Towson, MD Franchises Jiffy Lube operations	2,326	19,653	810	D	B	360	40	1982
101.	**Cellular Service** Glendale, CA Resells mobile telephone svcs.	2,325	24,852	1,025	D	F	34	3	1984
102.	**Int'l EPDM Rubber Roofing Systems** Toledo, OH Develops & supplies roofing systs.	2,261	9,444	400	D	D	27	5	1982
103.	**Holiday Builders** Melbourne, FL Builds houses	2,249	23,700	1,009	D	C	43	6	1983
104.	**CompuAdd (47)** Austin, TX Retails personal computers & accessories	2,248	240,766	10,253	D	D	540	25	1982
105.	**Compu-Link** Clearwater, FL Mfrs. & installs cable assemblies	2,223	3,624	156	D	B	95	12	1984
106.	**Hospital Correspondence Copiers (59)** San Jose, CA Provides medical record-copying svcs.	2,177	12,797	562	B	D	400	31	1982
107.	**Creative Designs** Ossining, NY Processes veneers	2,135	3,039	136	A	F	50	10	1980
108.	**Vitronix** Westboro, MA Distr. value-added microcomputers	2,131	11,603	520	D	D	31	3	1984
109.	**Champion Mortgage** Parsippany, NJ Provides mortgage banking svcs.	2,101	9,201	418	A	A	73	4	1981
110.	**East Coast Computer Systs.** (116) Tinton Falls, NJ Sells computer systs.	2,073	9,778	450	C	C	35	7	1980
111.	**National Engineering Service** North Billerica, MA Provides technical temporary-help svcs.	2,071	16,065	740	D	F	540	40	1984
112.	**Orbital Sciences (2)** Fairfax, VA Mfrs. NASA vehicles & space-tracking systs.	2,069	56,400	2,600	F	C	405	24	1982
113.	**Western Nugget Transport** Vancouver, WA Provides interstate transportation brokerage svcs.	2,066	2,664	123	D	F	13	2	1984
114.	**JasTech** Cleveland, OH Provides information syst. consulting svcs.	2,047	3,564	166	D	A	72	1	1982
115.	**Cape Fear Insulation** Wilmington, NC Provides commercial & industrial insulation svcs.	2,047	2,383	111	C	B	53	7	1984
116.	**Harris Foods** Marietta, GA Operates Wendy's franchise	2,045	2,338	109	F	F	24	4	1984
117.	**Mesa Products** Tulsa, OK Mfrs. & sells corrosion-control materials	2,027	3,191	150	D	D	10	1	1984
118.	**WordPerfect (71)** Orem, UT Develops software	2,017	167,762	7,923	A	B	1,150	84	1979
119.	**Sterling Management Systems (45)** Glendale, CA Provides business mgmt. training & consulting svcs.	2,009	19,949	946	D	D	209	10	1983
120.	**CitiCam Video Services** New York, NY Supplies video crews to TV productions	2,005	2,400	114	A	A	11	2	1984
121.	**KETIV Technologies** Portland, OR Mfrs. CAD/CAM/CAE systs.	1,986	3,045	146	D	F	42	3	1983
122.	**Grant Wood Specialties (191)** Nampa, ID Mfrs. oak doors	1,981	3,205	154	D	F	79	6	1971
123.	**Melannco International** Chelsea, MA Mfrs. photographic albums & accessories	1,979	5,342	257	D	F	43	12	1983
124.	**Source Window Coverings** Woodinville, WA Mfrs. custom window coverings	1,969	3,393	164	D	E	70	18	1984
125.	**National Investigative Services** Hinsdale, IL Provides corporate & financial investigations	1,967	4,650	225	A	E	43	3	1983
126.	**Applied Energy Services (282)** Arlington, VA Operates independent power-production facilities	1,957	55,374	2,692	D	F	264	42	1981
127.	**Logical Operations** Rochester, NY Provides computer training svcs.	1,953	2,649	129	D	F	51	3	1982
128.	**Ambitech Design Services** Glen Ellyn, IL Provides construction engineering svcs.	1,953	4,926	240	F	F	164	14	1982
129.	**Colonel's** Owosso, MI Mfrs. & mkts. automotive replacement parts	1,945	17,093	836	A	E	140	5	1984
130.	**Wesson, Taylor, Wells & Associates** Charlotte, NC Provides computer software consulting svcs.	1,941	6,797	333	D	D	130	6	1980

ANDY GOODWIN

#125

Andrew Doppelt
National Investigative Services Corp.
Corporate and financial investigator

GROWING UP

Mother Homemaker
Father Owned manufacturing company
Hometown Highland Park, Ill.
Education J.D.
Jobs IRS special agent; father's company

GETTING HERE

"Having come from a big bureaucracy and having worked for my father, I didn't want to put myself back in the position of being subordinate. The best way to avoid that was to be my own boss."

MY COMPANY, MY SELF

Inspiration "There are certain measurements you can use to tell whether your company is becoming a force: being invited to give speeches in places you've never heard of; getting clients you never tried to develop but who've heard of you."
Family in Business None
What's Changed "I don't do any investigations anymore. I'm strictly sales, marketing, and administration—where I think my talents lie."
Lose Sleep Over Raising money
Workweek 60 to 70 hours
Last Vacation "Can't remember."
Use a PC No
What's Next In process of merging with Laventhol & Horwath. Also talking with Hollywood producers about TV show based on the investigation business

FOOTNOTE

"I like the idea of a merger—it's going to give us a million dollars of referrals every year and a lot of money to finance growth. Plus I end up becoming a partner in an international firm."

MIKE ORTZ

#151

Sheila West
Archery Center Int'l Inc.
Distributor of archery products

GROWING UP

Mother Secretary
Father Professor
Hometown Jacksonville, Fla.
Education 30 hours of college
Jobs Inspirational speaker for homemakers; homemaker

GETTING HERE

"I was at the 'empty vision' time of my life—I'd been a homemaker for 18 years, my children were teenagers. I'd shot competitive archery in high school and my husband was a hunter, so he suggested buying a compound-bow store as a stepping-stone."

MY COMPANY, MY SELF

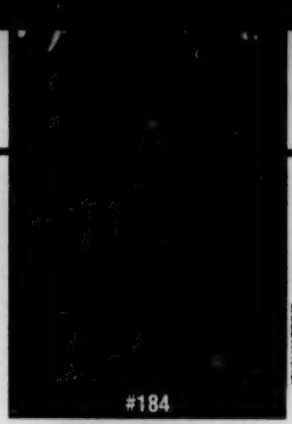
Inspiration Helping other entrepreneurs: "It stimulates me to stretch more."
Family in Business Husband, cofounder; son-in-law, purchasing agent; daughter, director of marketing
What's Changed "At first it was hard to accept I was a CEO. I mean, CEOs are people who run major companies. But I decided CEO stands for catch every obstacle and create endless opportunities, and I said OK, that's me."
Lose Sleep Over Profitability
Workweek 60 to 70 hours
Last Vacation Hawaii last fall—the first since starting ACI
Use a PC Laptop on the road
What's Next A new company for business and personal development and seminar workshops

FOOTNOTE

"My mother raised me by herself, and she was working, so I'm a survivalist. I didn't let stumbling blocks get in my way. I learned how to cook, how to be a wife, how to be a parent, so I figured, why can't I learn how to sell archery equipment?"

131.	**C.G. Enterprises** Southfield, MI Sells & svcs. microcomputer products	1,938%	$5,565	$273	D	C	30	3	1982
132.	**Telco Communications** (171) Seekonk, MA Provides promotional & fund-raising svcs.	1,933	4,351	214	D	D	27	4	1977
133.	**March-Westin** Morgantown, WV Provides construction mgmt. & contracting svcs.	1,927	2,392	118	D	D	18	2	1984
134.	**Computer Media Technology** Mountain View, CA Mfrs. & sells computer recording media	1,905	2,727	136	C	C	13	2	1984
135.	**Harvest** Bonita Springs, FL Provides health-care mgmt. svcs.	1,881	2,100	106	E	F	30	13	1968
136.	**Pacific Biotech** San Diego, CA Mfrs. medical diagnostic testing materials	1,858	4,346	222	B	F	89	8	1982
137.	**Omnicomp Graphics** Houston, TX Mfrs. computer graphics hardware	1,847	7,475	384	C	F	48	14	1982
138.	**Landmark Systems** Vienna, VA Mfrs. systs. software	1,823	20,206	1,051	A	A	161	11	1983
139.	**Mid-Atlantic Medical Svcs.** (90) East Rutherford, NJ Rents specialty medical equipment	1,822	5,479	285	D	A	52	23	1976
140.	**New Methods Research** Syracuse, NY Provides computer software	1,811	2,026	106	B	D	34	1	1983
141.	**Kalamazoo Banner Works** Kalamazoo, MI Mfrs. banners & stationery products	1,808	2,099	110	D	F	28	4	1983
142.	**Advanced Entry Systems** Dallas, TX Sells & installs security systs.	1,808	3,777	198	D	F	30	4	1984
143.	**Modular Instruments** Malvern, PA Mfrs. medical & research equipment	1,805	1,981	104	C	F	15	1	1984
144.	**Cowan** Joliet, IL Distr. beauty salon products	1,786	3,395	180	D	F	22	4	1983
145.	**Francoli, Richartz, Wolman & Flias** (396) Parsippany, NJ Provides advertising & PR svcs.	1,785	9,800	520	A	C	12	5	1980
146.	**Automotive Caliper Exchange** Long Beach, CA Remfrs. brake calipers & front-end systs.	1,768	7,172	384	C	D	111	16	1984
147.	**Buccino & Associates** Chicago, IL Provides crisis mgmt. consulting svcs.	1,764	5,724	307	A	A	40	1	1981
148.	**Microcomputer Power** Houston, TX Resells computer hardware & software	1,764	31,513	1,691	B	B	73	17	1982
149.	**BSE Management** Arcadia, CA Provides environmental engineering svcs.	1,730	6,898	377	C	A	102	5	1982
150.	**Financial Supermarkets** (211) Poughkeepsie, NY Provides financial svcs.	1,721	3,843	211	A	C	18	12	1978
151.	**Archery Center International** (307) Monroe, MI Mfrs. & distr. archery equipment	1,714	2,721	150	D	E	25	2	1984
152.	**Generic Business Solutions** Wilmington, DE Provides turnkey computer solutions	1,696	3,897	217	D	A	45	3	1984
153.	**Tarason Labels** Conover, NC Mfrs. printed labels & tags	1,691	2,525	141	C	A	18	3	1983
154.	**Xerox Business Centers** (238) Exton, PA Sells computers	1,688	26,106	1,460	C	E	50	4	1981
155.	**Government Technology Services** (5) Chantilly, VA Integrates & resells computer products	1,678	175,918	9,892	F	D	450	11	1983
156.	**Martin-Logan** Lawrence, KS Mfrs. & mkts. electrostatic loudspeaker products	1,666	2,172	123	A	F	25	3	1983
157.	**Resource Conservation Services** Yarmouth, ME Provides recycling & mgmt. svcs.	1,665	4,449	252	C	C	50	2	1983
158.	**Power Resources Operating** Canton, OH Operates gas & oil drilling, well operations	1,665	8,350	473	E	C	12	8	1981
159.	**MetroCareers** Houston, TX Provides contract staffing & placement svcs.	1,661	5,106	290	D	D	9	2	1984
160.	**Quad Systems** (19) Horsham, PA Mfrs. products for automated electronics industry	1,659	12,280	698	F	F	100	42	1981
161.	**Maryland Health & Fitness** Millersville, MD Operates Physicians Weight Loss Center franchise	1,655	1,790	102	B	D	18	3	1984
162.	**Aromatique** (39) Heber Springs, AR Mfrs. decorative room fragrances	1,647	9,837	563	A	A	131	86	1983
163.	**Bloodi-Systems** (162) Los Angeles, CA Distr. & sells motion picture supplies	1,637	4,342	250	C	C	13	1	1983
164.	**Cadmus Group** Waltham, MA Provides economic, policy, & planning svcs.	1,617	2,009	117	D	F	30	2	1983
165.	**RESOLUTE Building** Chapel Hill, NC Provides general contracting svcs.	1,592	7,595	449	D	D	45	3	1984

166.	**Mid Atlantic Storage Systems** Washington C.H., OH Provides specialty construction svcs.	1,586%	$4,975	$295	C	D	23	3	1984
167.	**Wahoo! Boats Unlimited** Ashland, VA Mfrs. & distr. fiberglass boats	1,572	5,318	318	A	F	55	15	1984
168.	**Bohdan Associates** Gaithersburg, MD Sells hardware, software, & peripherals	1,571	48,458	2,900	D	D	102	6	1984
169.	**Geoscience Consultants** (67) Albuquerque, NM Provides hazardous-waste mgmt. svcs.	1,567	5,351	321	D	A	65	5	1983
170.	**Communications International** (29) Norcross, GA Provides communications systs. integration	1,560	14,941	900	D	D	275	50	1980
171.	**Bulk International** Troy, MI Retails candy, nuts, & gifts	1,557	4,390	265	F	F	36	5	1983
172.	**Southwest Royalties** (358) Midland, TX Provides oil & gas exploration svcs.	1,541	3,808	232	A	F	28	3	1983
173.	**Wellex** (144) Fremont, CA Mfrs. & sells electronic components	1,535	10,887	666	D	F	236	55	1983
174.	**D.D.F. Transportation** (134) Tonawanda, NY Provides trucking transportation svcs.	1,524	6,579	405	D	E	67	6	1981
175.	**Meridian Travel** Brooklyn Hts., OH Provides travel mgmt. svcs.	1,516	10,100	625	D	F	35	3	1984
176.	**Colter Bay International** New York, NY Mfrs. apparel	1,500	13,937	871	C	F	25	5	1983
177.	**Routing Technology Software** Vienna, VA Mfrs. video routing software	1,490	2,321	146	D	F	26	5	1983
178.	**Eaglebrook Plastics** Chicago, IL Recycles plastics	1,489	6,199	390	C	E	50	8	1983
179.	**Paris Gourmet** Houston, TX Imports & distr. gourmet food	1,489	1,891	119	D	D	16	3	1983
180.	**Real World Systems** (102) Glen Mills, PA Integrates commercial computer systs.	1,471	3,518	224	D	D	14	3	1983
181.	**Barakat, Howard & Chamberlin** Oakland, CA Provides economic & mgmt. consulting svcs.	1,463	3,469	222	B	B	90	3	1982
182.	**Microsolutions** (85) Dallas, TX Sells PCs, software, & accessories	1,462	15,165	971	E	D	48	8	1982
183.	**Gateway Design Automation** Lowell, MA Supplies CAE software tools	1,462	6,106	391	A	A	75	4	1983
184.	**Russell Personnel Services** San Francisco, CA Provides permanent- & temporary-help svcs.	1,458	3,474	223	D	B	1,174	22	1983
185.	**Seatec** Warrior, AL Provides engineering & technical contract svcs.	1,450	8,569	553	D	D	10	3	1977
186.	**RMI Resource Management** (46) Media, PA Provides specialty contract svcs.	1,439	5,510	358	F	D	40	17	1979
187.	**Wellness & Lifestyle** Dallas, TX Operates weight-loss clinics	1,432	2,558	167	B	A	57	7	1983
188.	**Rizzo Associates** Natick, MA Provides engineering & environmental svcs.	1,429	4,160	272	D	C	80	7	1983
189.	**Florida Fulfillment** Miami, FL Provides distr., warehousing, & direct-mail svcs.	1,429	3,745	245	C	C	105	10	1982
190.	**National Data Products** Largo, FL Distr. computers, equipment, & supplies	1,428	7,504	491	D	C	45	15	1982
191.	**Shawmut Design & Construction** (219) Boston, MA Provides general contracting svcs.	1,412	19,278	1,275	D	E	120	20	1982
192.	**Allied Computer Group** Milwaukee, WI Sells, svcs., & supports computer systs.	1,405	7,839	521	C	E	34	8	1983
193.	**Interay International X-Ray Tube** N. Charlestown, SC Mfrs. & svcs. X-ray tubes	1,402	3,604	240	D	D	7	4	1982
194.	**Leros Point to Point** Thornwood, NY Provides corporate transportation svcs.	1,386	2,155	145	B	D	48	8	1984
195.	**Nationwide Vending Services** Upland, CA	1,383	6,718	453	E	F	40	5	1983
196.	**Donaldson & Co.** Atlanta, GA Operates institutional stockbroker firm	1,370	2,513	171	B	C	4	2	1984
197.	**Rocktron** Rochester, MI Assembles & tests audio signal equipment	1,368	2,261	154	D	D	27	1	1982
198.	**Roadshow Services** San Francisco, CA Provides trucks & drivers for performers	1,365	2,754	188	D	D	55	16	1982
199.	**wTe** Bedford, MA Builds & operates resource-recovery facilities	1,363	13,136	898	D	F	170	7	1981
200.	**SIR Group** (263) Dallas, TX Provides insurance sales & svcs.	1,355	12,338	848	C	D	45	6	1983



JOHN HARDING

#184

Carol Russell
Russell Personnel Services Inc.

Provides full-time and temporary personnel

GROWING UP

Mother TV makeup artist
Father Stage manager with the Minsky Brothers burlesque show
Hometown Manhattan
Education High school. "I never finished Hunter College."
Jobs Worked way up through temporary-services industry, starting as file clerk

GETTING HERE

"I became a junior partner at an employment firm—you have all the work and none of the say. I just decided the time had come to push off on my own."

MY COMPANY, MY SELF

Inspiration Reading everything—from biographies to religion
Family in Business None
What's Changed "I do miss just being able to look up and tell everybody something. There's a camaraderie you miss. Also the uncertainty, which may be why we push ourselves to grow."
Lose Sleep Over Wanting to grow faster
Workweek 40 to 45 hours
Last Vacation Four days in Palm Desert, Calif. "By the fourth day I was going crazy. I couldn't stand not working."
Use a PC? No. "I'm a PC illiterate."
What's Next New offices, maybe franchising

FOOTNOTE

"I'm an extremely ambitious human being, and the more successful I become, the more ambitious I become. My anxiety is, can I get far enough fast enough? I don't want to sound grandiose, but it's kind of like being a success junkie."

JOHN HARDING

#214

Richard H. Novak
N. H. S. Inc.
Manufacturer and distributor of skateboards and related products

GROWING UP

Mother Beautician, store clerk
Father Maintenance engineer, construction
Hometown Capitola, Calif.
Education One year junior college
Jobs Fisherman, garbageman, sailor, surfboard maker

GETTING HERE

"My partner, a friend, and I made the first precision bearing wheel and jumped into a 1950 Chevy and drove around the country selling it, and within a year or so we had a fistful of money. We only did it so we could surf most of the time."

MY COMPANY, MY SELF

Inspiration "My parents, a friend I sailed with for a year and a half, an older Chinese man."
Family in Business Nephew in production
What's Changed "I hate responsibility, but I have a ton of it. I don't enjoy expensive cars or houses or any of that stuff. But I like the game of business, I think it's fun."
Lose Sleep Over Dealing with employees' problems
Workweek 45 hours
Last Vacation "I've been all over the world a few times, surfing. Now, I'd rather stay here."
Use a PC? No
What's Next Maybe license off parts of business

FOOTNOTE

"When I was 18 I saw all these people retiring at 55 and their bodies were destroyed and they didn't have any money; I didn't have any money either, but my body worked, so I figured if I retired now, and went to work later, it would probably balance itself out."

201.	**Peter Norton Computing** (136) Santa Monica, CA Mfrs. PC utilities software	1,343%	$15,198	$1,053	B	A	59	4	1982
202.	**Progressive Ribbon** Middletown, OH Mfrs. computer printer ribbons	1,340	7,200	500	D	D	96	15	1984
203.	**Transamerica Energy Associates** (50) Atlanta, GA Provides technical engineering svcs.	1,338	11,617	808	D	D	237	15	1982
204.	**Central Coast Analytical Svcs.** San Luis Obispo, CA Provides analytical environmental lab testing	1,336	2,427	169	D	C	55	4	1984
205.	**Custom Living Homes & Comm.** (143) Chester, NJ Builds new houses	1,332	106,586	7,444	D	C	150	10	1973
206.	**Kidwell Construction** Kingdom City, MO Provides general contracting svcs.	1,332	6,628	463	A	A	35	10	1983
207.	**Falcon Microsystems** Landover, MD Distr. & integrates software systs.	1,328	39,869	2,791	E	E	150	13	1983
208.	**Software 2000** (189) Hyannis, MA Develops & distr. business application software	1,328	9,681	678	B	C	94	8	1981
209.	**Corporate Resource Associates** Redwood City, CA Designs & develops training systs.	1,321	1,677	118	D	C	23	3	1984
210.	**Action Systems Technologies** (103) Indianapolis, IN Provides engineering & technical svcs.	1,306	7,032	500	F	A	190	3	1980
211.	**Computer People Unlimited** Milwaukee, WI Provides data-processing & software eng. svcs.	1,299	11,182	799	D	C	182	38	1984
212.	**Scentique** Concord, CA Mfrs. sachets, potpourri, & intimate apparel	1,289	2,820	203	C	D	51	3	1983
213.	**IMRS** (244) Stamford, CT Provides software solutions	1,281	8,161	591	D	F	65	14	1981
214.	**N.H.S.** Soquel, CA Mfrs. & distr. skateboards	1,271	20,461	1,492	A	D	125	10	1972
215.	**Pentz Design Pattern & Foundry** Duvall, WA Operates precision sand-cast aluminum foundry	1,266	1,421	104	D	A	33	3	1980
216.	**Jandel Scientific** Corte Madera, CA Mfrs. microcomputer software tools	1,266	3,101	227	C	F	29	9	1982
217.	**David Alon Enterprises** Vernon, CA Mfrs. women's & children's clothing	1,264	24,913	1,827	D	D	145	48	1984
218.	**Cable Photo Systems** Bloomington, MN Provides photography & photo lab svcs.	1,258	2,649	195	C	F	20	4	1984
219.	**Advent Software** San Francisco, CA Develops portfolio mgmt. software & svcs.	1,257	2,267	167	C	A	35	2	1983
220.	**Pearl's Kitchen** Detroit, MI Provides food-distr. svcs.	1,249	4,277	317	D	F	9	3	1979
221.	**SBT** Sausalito, CA Mfrs. accounting & MIS computer software	1,249	8,349	619	C	D	85	10	1981
222.	**Exsel** Rochester, NY Remkts. computer equipment	1,241	5,379	401	D	F	18	6	1983
223.	**Clinical Medical Equipment** Roswell, GA Provides independent medical svcs.	1,239	6,948	519	F	F	84	24	1980
224.	**Elkins Constructors** Jacksonville, FL Provides general & mechanical contracting svcs.	1,228	17,440	1,313	D	F	45	15	1952
225.	**Charing Co.** Madison, WI Provides retirement plan svcs.	1,228	1,328	100	E	E	20	9	1983
226.	**Certified Engineering & Testing** Braintree, MA Provides environmental testing & consulting svcs.	1,222	8,340	631	D	D	165	16	1983
227.	**Mortara Instrument** Milwaukee, WI Mfrs. electrocardiography instruments	1,208	8,685	664	A	A	30	9	1982
228.	**Paul Sebastian** (133) Ocean, NJ Mfrs. fragrances	1,205	26,682	2,044	D	D	94	20	1979
229.	**Park Cardiographics** Taunton, MA Provides diagnostic medical svcs.	1,202	20,875	1,603	A	A	175	30	1981
230.	**Walker Richer & Quinn** (166) Seattle, WA Mfrs. communications software	1,184	12,324	960	C	D	80	55	1980
231.	**Weathershade** (408) Apopka, FL Mfrs. plastic lawn & garden products	1,170	16,759	1,320	F	F	112	15	1981
232.	**Eastern Marine Construction** (55) Nashua, NH Provides construction svcs.	1,169	5,547	437	C	B	110	28	1981
233.	**H&M Food Systems** (12) North Richland Hills, TX Mfrs. meat-based food products	1,161	40,258	3,192	D	D	165	23	1983
234.	**Electrotek Concepts** Mountain View, CA Provides computers for electric utility industry	1,155	1,996	159	D	F	22	5	1984
235.	**Inter-ed** Rochester, NY Mfrs. public access computer information systs.	1,153	1,687	133	C	A	18	2	1982

K.D. LAWSON/BLACK STAR

Jerry Meador
Home Grown Woods Inc.

Manufacturer of wooden gift items

GROWING UP

Mother Homemaker
Father Safety engineer
Hometown Nashville
Education College night school after Vietnam
Jobs Musician; public works official

GETTING HERE

"My wife and I were both job burnouts—she was a guidance counselor and I was in government in this small town near Nashville—so with enough savings to get us by we decided we would just quit and go to Pigeon Forge, Tenn., to open our business."

MY COMPANY, MY SELF

Inspiration "The money. And having created the business ourselves."
Family in Business Wife, cofounder and VP of finance
What's Changed "It certainly was scary to get started up. Of course, we never considered failure as an option. It just took a lot of nerve to leave two secure jobs. It's still scary—but today we don't have as much time to worry about it."
Lose Sleep Over Cash flow
Workweek 70 hours
Last vacation Florida beach with family in September
Use a PC Yes, a little
What's Next Starting another company—"I'd rather not say what kind right now." Plan to keep Home Grown Woods for a while.

FOOTNOTE

"I guess you'd call me a redneck. Music is my first love—I played a lot around Nashville many years ago, and it gets in your blood and won't leave you. And my roots are in the country. I like trucks and fishing and my dogs and my kids."

	Company (1988 rank) Business description	1988-89 growth	1988 sales	1988 profits	Employee growth	Sales growth	Employees	Founded
236.	**Enseco** (22) Amarillo, TX Provides environmental cleanup svcs.	1,153%	$12,817	$1,023	D	D	52	5 1982
237.	**American Rug Craftsmen** Sugar Valley, GA Mfrs. & mkts. woven & tufted rugs	1,149	15,478	1,239	C	C	292	4 1984
238.	**Devtree, Russell Gladwin**, MI Integrates CAD/CAM systs.	1,149	2,210	177	D	D	15	4 1969
239.	**J.B. Caswell Contracting** Jacksonville, FL Provides road & underground utility constr. svcs.	1,137	15,326	1,239	C	A	150	30 1983
240.	**Pretty Punch Shoppettes** (314) Sanford, FL Mfrs. embroidery craft kits	1,119	4,634	380	C	D	67	8 1981
241.	**Compuclassics** Canoga Park, CA Sells computer software through mail order	1,119	11,800	968	D	D	40	2 1984
242.	**Olympic Temporary Services** Covina, CA Provides permanent- & temporary-help svcs.	1,116	5,166	425	D	F	14	4 1983
243.	**Active Parenting** Marietta, GA Develops parent education videos	1,115	1,300	107	A	F	13	2 1983
244.	**Integrated Systems Control** Virginia Beach, VA Provides technical & engineering svcs.	1,114	3,278	270	C	F	68	14 1983
245.	**NCO Financial Systems** (389) Blue Bell, PA Provides financial svcs.	1,105	1,554	129	C	D	31	3 1926
246.	**Landscapes Unlimited** Lincoln, NB Constructs golf courses	1,098	13,806	1,152	B	F	75	10 1976
247.	**Factor, Fox & Associates** (201) Los Angeles, CA Provides telemkt. & direct-mail svcs.	1,095	6,631	555	F	E	155	10 1983
248.	**Alpha Computers** (94) Lake Oswego, OR Sells & svcs. microcomputers	1,094	9,000	754	D	D	67	11 1982
249.	**Kaminari** (323) Brea, CA Mfrs. aerodynamics components for automobiles	1,093	2,982	250	C	C	75	12 1982
250.	**Rippey** Santa Clara, CA Mfrs. cleaning products & clean-room supplies	1,091	2,393	201	D	F	19	7 1983
251.	**Minker Construction** Hockessin, DE Provides general contracting svcs.	1,084	7,813	660	C	C	25	2 1983
252.	**DMC Construction** Fresno, CA Provides general contracting svcs.	1,080	13,978	1,185	D	D	53	8 1976
253.	**Home Grown Woods** Sevierville, TN Mfrs. wooden gifts & decorative accessories	1,077	1,495	127	B	A	48	27 1982
254.	**Arrowhead Landscaping & Maint.** (99) Phoenix, AZ Provides landscape contracting svcs.	1,070	3,953	338	F	C	165	9 1983
255.	**Network Controls International** (161) Charlotte, NC Provides hardware & software svcs.	1,065	9,993	858	D	C	40	18 1983
256.	**Doru & Associates Contracting** Bay City, MI Provides asbestos-abatement & demolition svcs.	1,064	11,613	998	C	D	75	20 1976
257.	**Circle K RV's** Lapeer, MI Sells & svcs. RVs & trailers	1,058	2,046	177	D	D	6	3 1984
258.	**Greater Alarm** (181) Huntington Beach, CA Provides electronic security svcs.	1,056	2,812	226	D	B	60	16 1981
259.	**Syracuse Heartlines Newspaper** Syracuse, NY Publishes newspaper; provides graphic arts svcs.	1,054	1,223	106	C	F	28	9 1984
260.	**Hansen** Des Moines, IA Provides general contracting svcs.	1,053	16,017	1,389	D	D	80	10 1979
261.	**Wang Associates Public Relations** New York, NY Provides public relations svcs.	1,049	1,436	125	B	E	18	2 1983
262.	**Salem Screen Printers** Salem, NH Mfrs. & distr. T-shirts & active wear	1,035	16,191	1,426	C	C	126	20 1981
263.	**Princeton Review** (106) New York, NY Offers preparation for college admissions tests	1,035	5,548	489	C	C	35	14 1983
264.	**Lester Telemarketing** Branford, CT Provides telemkt. & mkt. research svcs.	1,031	3,202	283	D	F	75	5 1981
265.	**S. Cohen & Associates** McLean, VA Provides environmental consulting svcs.	1,031	2,647	234	D	C	20	3 1981
266.	**Beckett** Lionville, PA Mfrs. self-adhesive labels	1,028	8,744	775	D	D	58	4 1982
267.	**Electronic Liquid Fillers** (194) LaPorte, IN Mfrs. packing equipment	1,028	9,573	849	A	A	90	6 1981
268.	**Henley International** (403) Sugar Land, TX Mfrs. medical equipment	1,024	10,172	905	D	F	110	12 1976
269.	**CText** Ann Arbor, MI Mfrs. newspaper publishing systs.	1,022	7,318	652	C	F	89	12 1983
270.	**City Sports** Boston, MA Sells sporting goods	1,021	3,923	350	D	F	24	4 1983

JAY BROUSSEAU

#282

C. Ron Martell
Microdynamics Inc.
Provides CAD/CAM systems for apparel and shoe companies

GROWING UP

Mother Worked at family business
Father Owned auto repair shop
Hometown Orange, Tex.
Education M.S. engineering
Jobs Designed weapons systems at Sandia Laboratories

GETTING HERE

"I had a personal goal to start a business by the time I was 30; I missed the target by a year. I grew my first company to $25 million, sold my interest, and started Microdynamics the next year."

MY COMPANY, MY SELF

Inspiration Father, who ran his shop with a 10th-grade education
Family in Business None
What's Changed "I used to work on the weekends on technical problems, and I've tried to disassociate myself from those. I worry about the bigger business issues now."
Lose Sleep Over Cash flow and profitability. "Since we're VC-backed, there's constant pressure to maximize profits."
Workweek 60 hours
Last vacation January, to Colorado for a week of skiing
Use a PC No
What's Next Grow to $100 million, then start new company

FOOTNOTE

"We're shipping a lot to Russia, and since the key to Gorbachev's remaining in power is his being able to build up consumer goods, hopefully our equipment will help do that. Because he's been the best thing for peace. I've come full circle—and I feel a lot better giving the Russians shoe factories and apparel equipment than worrying about nuclear weapons."

271.	**Hydro Services** Long Beach, CA Provides industrial maintenance svcs.	1,015%	$7,206	$646	C	D	120	15	1982
272.	**Prestige Leather Creations** Vernon, CA Mfrs. belts	1,014	10,147	911	C	D	300	30	1974
273.	**IG Systems** Los Angeles, CA Provides data-processing svcs.	1,013	5,499	494	C	E	70	10	1984
274.	**Advanced Sciences** (370) Albuquerque, NM Provides technical & consulting svcs.	1,009	18,353	1,655	D	E	221	34	1977
275.	**Corporate Book Resources** Rutherford, NJ Provides business-oriented book ordering svcs.	1,007	1,527	138	D	F	1	1	1982
276.	**Vanguard Research** Fairfax, VA Provides design, engineering, & systs. analysis svcs.	1,004	6,524	591	D	F	85	14	1984
277.	**T.G. Bauer Associates** Falls Church, VA Provides technical consulting svcs.	1,000	5,348	486	D	E	83	14	1981
278.	**EVI** Columbia, MD Mfrs. radio communications equipment	1,000	1,386	126	D	E	15	3	1983
279.	**John Paul Mitchell Systems** Saugus, CA Mfrs. salon hair-care products	996	62,500	5,700	A	A	37	20	1980
280.	**Super Wash** (397) Morrison, IL Builds & runs coin-operated car wash facilities	996	16,696	1,524	B	C	54	3	1981
281.	**Staff Control** Cerritos, CA Provides temporary-help svcs.	994	11,971	1,094	D	D	46	4	1983
282.	**Microdynamics** (260) Dallas, TX Provides CAD/CAM systs.	994	27,298	2,496	D	F	204	48	1979
283.	**American Fabricating** Boonville, IN Mfrs. & distr. auto racing parts	991	4,922	451	B	A	33	7	1983
284.	**Lunseth Engineers** Milwaukee, WI Provides engineering consulting svcs.	986	1,184	109	D	F	22	4	1983
285.	**Wilson Sculley Associates** St. Louis, MO Operates advertising agency	973	7,628	711	C	D	24	4	1983
286.	**Quicksilver Express Courier** (177) Minneapolis, MN Provides courier svcs.	973	5,964	556	C	D	300	100	1982
287.	**Addtemps/J.M. Peters** Cincinnati, OH Provides temporary-help svcs.	970	1,659	155	D	F	10	2	1984
288.	**Venture Graphics** Waukesha, WI Provides lithographic color-seperation svcs.	969	2,106	197	A	B	33	7	1984
289.	**Greenleaf Health Systems** (35) Chattanooga, TN Operates private psychiatric hospitals	963	28,698	2,700	D	F	420	160	1981
290.	**Leather Center** (141) Carrollton, TX Mfrs. & sells leather furniture	961	46,655	4,399	D	F	447	41	1982
291.	**Orchard Computer** Plymouth, MA Sells computer hardware & software	960	4,080	385	E	D	30	7	1984
292.	**DiCesare Mechanical** Schenectady, NY Installs plumbing, heating, & AC systs.	960	10,363	978	D	D	95	10	1982
293.	**Illini Technology** Springfield, IL Mfrs. electronic instrumentation	958	2,546	241	D	D	39	7	1982
294.	**Core International** (285) Boca Raton, FL Mfrs. storage subsysts. for microcomputers	949	22,131	2,111	D	C	128	22	1979
295.	**Acoustic Imaging Technologies** Tempe, AZ Mfrs. medical diagnostic ultrasound equipment	945	4,161	398	F	F	180	20	1983
296.	**Proteon** Westborough, MA Mfrs. systs.-level products for networking	944	40,618	3,892	D	F	260	72	1972
297.	**Lincoln Scenic Studios** New York, NY Provides background scenery for TV shows	943	10,519	1,009	C	F	50	17	1966
298.	**Reliable Mechanical** Louisville, KY Provides mechanical contracting svcs.	942	12,396	1,190	D	B	125	12	1982
299.	**Distrib. Analysis Research & Tech.** Bala Cynwyd, PA Develops vehicle routing & scheduling software	940	3,192	307	D	C	32	7	1981
300.	**Technatics** (216) Arlington, VA Provides engineering, computer, & professional svcs.	938	9,776	942	C	C	125	15	1982
301.	**Advanced Computer Concepts** Arlington, VA Mfrs. & mkts. computer hardware & software	935	20,219	1,954	C	E	40	5	1982
302.	**Group Benefit Services** Lutherville, MD Administers employee benefits programs	933	24,131	2,336	D	D	39	5	1980
303.	**STAT Medical Services** Hollywood, CA Provides temporary-nursing svcs.	933	14,735	1,427	C	A	1,000	100	1982
304.	**Oscor Medical** (79) Palm Harbor, FL Mfrs. products for microsurgery	932	4,191	406	C	F	45	8	1982
305.	**RMB Fertilizing/Spraying Systems** Hiawatha, KS Mfrs., distr., & sells sprayer & fertilizer equipment	927	1,623	158	D	F	18	3	1980

306.	**Stockpot Soups** Redmond, WA Mfrs. fresh soup concentrates	926%	$3,395	$331	D	E	65	10	1982
307.	**Management Research Group** Portland, ME Provides mgmt., leadership, & sales consulting svcs.	917	1,230	121	A	A	7	3	1983
308.	**Allservice Foods** Addison, IL Mfrs. & packages snack foods	915	1,980	195	C	D	17	3	1984
309.	**Venture Communications Int'l** (44) New York, NY Provides direct-mail advertising svcs.	915	5,948	586	B	A	34	6	1983
310.	**Gardener's Supply** Burlington, VT Sells garden supplies through mail order & retail	914	10,545	1,040	D	F	60	10	1983
311.	**Public Interest Affiliates** (135) Chicago, IL Syndicates radio & TV programming	913	4,135	408	D	B	35	10	1980
312.	**Encore Marketing International** (360) Lanham, MD Provides travel arrangement svcs.	910	69,914	6,922	C	D	900	59	1978
313.	**Data Source Media** (185) Lincoln, NB Distr. computer supplies	905	2,926	291	D	D	13	3	1973
314.	**Mrs. Hall's Cookies** San Pedro, CA Distr. bakery products	903	1,554	155	D	C	60	10	1982
315.	**Coddbarrett Associates** (154) Providence, RI Provides computer graphics svcs.	901	2,493	249	F	C	25	15	1982
316.	**Green Thumb Enterprises** Sterling, VA Provides commercial landscape contracting svcs.	900	6,601	660	C	B	200	20	1982
317.	**Capricorn Systems International** San Jose, CA Provides computer consulting svcs.	900	3,630	363	C	D	5	2	1978
318.	**C-Cubed** (214) Alexandria, VA Provides engineering & technical support svcs.	900	10,637	1,064	D	D	150	24	1974
319.	**Syscomm International** (63) Hauppauge, NY Sells computer hardware & software	900	28,292	2,830	D	D	60	13	1980
320.	**Dialogic Communications** Franklin, TN Mfrs. interactive voice-response systs.	894	2,017	203	D	F	17	8	1982
321.	**Little & Co.** (339) Salt Lake City, UT Provides mortgage field svcs.	887	6,228	631	C	D	83	8	1979
322.	**Burdco Environmental** (306) Traverse City, MI Provides asbestos-abatement svcs.	887	11,385	1,154	D	D	130	25	1982
323.	**Packaging Resources** Lake Forest, IL Mfrs. plastic food packaging	885	97,058	9,853	D	F	945	250	1984
324.	**First Intercontinental** Irving, TX Imports & exports agricultural products	884	5,185	527	B	C	6	1	1981
325.	**Smart** Torrance, CA Provides medical record correspondence svcs.	874	19,574	2,009	B	B	650	465	1976
326.	**Health Care Associates** (233) Avon, CT Owns & operates nursing homes	871	53,750	5,536	D	D	2,000	300	1976
327.	**Parencorp** Brookline, MA Develops real estate	867	23,256	2,404	D	D	12	5	1978
328.	**Sunday River Skiway** (163) Bethel, ME Operates ski resort	866	23,627	2,445	A	A	150	35	1958
329.	**Prime Technology** (174) Grand Rapids, MI Distr. machine tools	864	3,500	363	F	D	21	6	1982
330.	**Landmark Hotel** (78) Topeka, KS Develops & operates hotels & restaurants	863	73,949	7,680	F	F	3,500	800	1982
331.	**Backroads Bicycle Touring** Berkeley, CA Provides van-supported bicycle tours	861	4,084	425	C	D	39	5	1979
332.	**Georgia Mountain Water** (320) Marietta, GA Bottles, distr., & sells spring water	859	1,794	187	C	D	30	6	1982
333.	**Creative BioMolecules** Hopkinton, MA Produces proteins for medical applications	858	4,281	447	F	F	61	36	1981
334.	**Best Mailing Lists** New York, NY Provides direct-mail & mkt. svcs.	853	1,029	108	B	F	8	1	1984
335.	**Software Alternatives** Maumee, OH Develops software; integrates hardware	849	13,591	1,432	C	D	230	35	1978
336.	**Rue de France** (257) Newport, RI Mfrs. & sells French lace curtains	849	2,610	275	D	D	35	5	1982
337.	**Unique Transportation Systems** Lewisville, TX Provides trucking svcs.	848	3,905	412	F	C	60	12	1983
338.	**Russell Construction** (48) Bettendorf, IA Provides general contracting svcs.	845	6,125	648	D	F	80	15	1983
339.	**Hazdat Environmental Group** Buffalo, NY Provides hazardous-waste transport & consult. svcs.	845	8,244	881	C	F	80	10	1984
340.	**Bubbling Bath Spa & Tub Works** Rockville, MD Mfrs. & sells jetted bathtubs & spas	844	1,180	125	D	C	10	2	1979

#336

ONNE VAN DER WAL

Pamela Kelley
Rue de France Inc.
Manufacturer of French lace curtains

GROWING UP

Mother Homemaker; took over business when husband died
Father Owned and managed funeral home
Hometown Washington, N.J.
Education B.A. math; J.D.
Jobs Attorney for Securities and Exchange Commission; cofounded law firm in 1983

GETTING HERE

"My husband and I lived in Paris for a few years, and I had French lace curtains on my window. I figured that if I thought they were an attractive alternative to Levelor blinds, maybe other people would, too. I also wanted a business excuse to go back to Paris."

MY COMPANY, MY SELF

Inspiration New-product development. "That enthuses me, gets the brain working."
Family in Business Husband consults on advertising
What's Changed "When I started I had no resources for locating raw materials or asking questions. A lot of what I was doing was in the dark. Now, the challenges come from managing people."
Lose Sleep Over Cash flow
Workweek More than 70 hours, between this and law firm
Last Vacation Competed in an international women's sailing championship last fall (crew placed 5th)
Use a PC Yes, a laptop
What's Next More of the same

FOOTNOTES

"When time pressures get overwhelming, my husband asks, 'Well, why do you have two jobs?' But I like my partners in the law firm, and I don't have too many people I can complain to in my own firm, since I'm the top."

LEIF SKOOGFORS/WOODFIN CAMP

Michael Feeney Educational & Fun Ltd.

Retailer of educational toys and teaching aids

GROWING UP

Mother Nurse
Father Funeral director
Hometown Reading, Pa.
Education Left 11th grade to join Army; mortuary school
Jobs Vietnam 1966 to '68; funeral director; coroner; county commissioner

GETTING HERE

"My wife was a teacher, but the stores she went to for good materials were always out of stuff. It was frustrating. So we opened our own store, decided to give it a try."

MY COMPANY, MY SELF

Inspiration Former colleagues
Family in Business Wife, cofounder and main buyer
What's Changed "The attention. With one small store, nobody at the toy show wanted to talk to me. With three stores, they're inviting me to the back room for a soda. Now, with five, they're giving me a sandwich, too."
Lose Sleep Over Cash flow
Workweek 5 hours; full-time county commissioner
Last Vacation Camping at the Grand Canyon of Pennsylvania
Use a PC? Yes, at home and in both offices
What's Next Two more stores

FOOTNOTE

"Since Vietnam I haven't touched a gun. Even now, I can feel a tightness in my chest just talking about it. There's a place in a person's life to understand what a gun is and how it's used, but I don't think it should be for very young kids. So parents who want to isolate their children from that for a time know they can walk in our store and there's no evidence of violence."

341.	**Xyquad** (366) St. Louis, MO Provides computer consulting svcs.	842%	$7,222	$787	B	F	71	27	1979
342.	**RPR & Associates** (37) Columbia, SC Provides general contracting & mgmt. svcs.	837	74,849	7,984	D	D	695	128	1977
343.	**Educational & Fun Reading**, PA Sells educational supplies & toys	837	1,284	137	D	F	15	4	1983
344.	**U S Realty Associates** Alexandria, VA Provides govt. & military real-estate svcs.	837	1,012	108	D	D	13	3	1984
345.	**Forms Direct** Frederick, MD Provides direct-mail printing & mailing svcs.	836	4,923	526	F	C	95	6	1983
346.	**MicroProse Software** (72) Hunt Valley, MD Develops & publishes entertainment software	831	16,090	1,728	C	C	142	16	1982
347.	**Life Design Systems** (423) Carrollton, TX Mfrs. respiratory & anesthetic devices	829	11,388	1,226	A	D	300	70	1977
348.	**Cell-Con** Exton, PA Repackages batteries	829	2,275	245	E-	C	12	5	1981
349.	**Teledial America** Grand Rapids, MI Provides long-distance telephone svcs.	828	20,531	2,212	C	F	46	14	1983
350.	**Echo Data Services** Lionville, PA Protects, duplicates, & packages software	827	3,049	329	C	D	24	4	1983
351.	**Leopardo Construction** Glendale Heights, IL Provides contracting & construction svcs.	826	13,639	1,473	D	F	50	12	1979
352.	**Chemical Technologies** Jackson, MI Mfrs. machining & grinding coolants	822	3,834	416	D	C	13	4	1983
353.	**Australian Wines** Roswell, GA Imports, promotes, & distr. Australian wines	821	1,216	132	B	F	6	2	1981
354.	**Schubert Environmental Equip.** Glendale Heights, IL Mfrs. & sells air pollution-control equipment	821	1,013	110	A	C	10	1	1990
355.	**Anderson Soft-Teach** San Jose, CA Mkts. training videotapes	819	1,571	171	C	C	23	4	1983
356.	**Trailco Leasing** Greensboro, NC Rents & leases semitrailers	818	3,030	330	B	F	41	1	1983
357.	**Consolidated Planning** (208) Charlotte, NC Provides financial svcs.	814	5,969	653	D	F	145	45	1981
358.	**Skoda, Minotti, Reeves** (478) Mayfield Village, OH Provides full-service accounting svcs.	812	2,033	223	D	D	28	6	1980
359.	**National Nurses Service** Silver Spring, MD Provides temporary-nursing svcs.	808	5,423	597	D	F	31	6	1982
360.	**Phoenix Process Equipment** Louisville, KY Mfrs. waste sludge pressure filters	806	2,672	295	A	D	7	2	1984
361.	**Royal Cabinets** Ontario, CA Mfrs. & installs cabinets	804	6,298	697	D	A	125	29	1984
362.	**Serrot** Huntington Beach, CA Mfrs. & installs storage tank linings	793	23,206	2,600	D	D	185	51	1978
363.	**Made in France** Los Angeles, CA Imports & distr. food products	791	2,050	230	D	A	15	2	1984
364.	**Louisiana Business College of Monroe** Monroe, LA Operates private vocational school	791	6,225	699	D	D	268	30	1976
365.	**Silton-Bookman Systems** Cupertino, CA Develops & mkts. software	789	1,280	144	C	D	14	3	1984
366.	**Cosmopolitan Travel** San Diego, CA Provides travel arrangement svcs.	788	1,048	118	A	F	3	2	1984
367.	**Construction Technology** West Palm Beach, FL Provides general contracting svcs.	785	2,700	305	C	F	40	6	1983
368.	**Moose's Welding & Construction** Lyman, WY Provides general oil-field construction svcs.	785	2,504	283	D	C	100	10	1984
369.	**Practice Management Systems** (158) Needham, MA Provides office automation svcs.	785	6,786	767	C	B	79	5	1983
370.	**Full Line Foods** Camden, NJ Distr. food	783	5,313	602	D	D	12	4	1980
371.	**U.S. Landscape** Sea Cliff, NY Provides landscape contracting svcs.	782	1,623	184	C	D	38	10	1984
372.	**Pepco Extruded Products** Fresno, CA Mfrs. water-conservation products	778	2,098	239	D	C	64	2	1983
373.	**White Pine** (386) Middleton, WI Sells clothing through mail order	773	10,221	1,171	B	D	25	5	1981
374.	**Belkin Components** (112) Gardena, CA Mfrs. computer interface hardware	773	5,026	576	C	D	38	8	1983
375.	**Continental Financial Resources** Woburn, MA Provides equipment leasing svcs.	772	3,777	433	D	E	20	3	1983

376.	**International Galleries** Lincoln, NE Provides direct-mail & mkt. svcs.	770%	$8,432	$969	D	F	86	10	1978
377.	**Logicraft** (232) Nashua, NH Mfrs. computer networking products	767	8,782	1,013	C	C	70	11	1975
378.	**Royal Plans** Greenville, NC Distr. fund-raising products to schools	761	1,119	130	C	F	9	2	1984
379.	**Casec** McLean, VA Provides systs. engineering & custom software svcs.	757	7,527	878	D	C	75	18	1976
380.	**McClanahan & Co.** New York, NY Packages textbooks	755	9,187	1,074	A	A	20	3	1976
381.	**Comsys Technical Services** Rockville, MD Provides software programming & engineering svcs.	755	9,001	1,053	D	D	170	21	1979
382.	**U-Save Auto Rental of America** (169) Hanover, MD Franchises rental car outlets	754	10,141	1,187	D	C	15	6	1979
383.	**Accutest Laboratories** (409) Dayton, NJ Provides environmental & medical testing svcs.	754	5,208	610	B	B	75	25	1956
384.	**Gary A. Taylor Construction** (157) Jackson, TN Provides general contracting svcs.	753	7,006	821	D	D	56	4	1984
385.	**Comstock Creations** (200) Durango, CO Mfrs. giftware & jewelry	752	2,216	260	B	B	55	10	1982
386.	**Advanced Energy Industries** (499) Fort Collins, CO Mfrs. electronic power supply systs.	752	15,889	1,862	D	B	210	128	1980
387.	**Hudson Valley Tree** (58) Newburgh, NY Mfrs. artificial Christmas trees	752	20,094	2,359	C	C	900	200	1982
388.	**Draughon Training Institute** Shreveport, LA Operates private vocational school	751	5,772	678	D	D	300	30	1891
389.	**Ideal Computer Services** Livermore, CA Sells used computer products	750	1,886	222	D	F	18	3	1983
390.	**Custom Property Management** Lake Worth, FL Manages real estate	743	2,732	324	E	F	120	8	1982
391.	**Forecast Mortgage** Rancho Cucamonga, CA Develops real estate	742	70,659	8,388	D	C	148	12	1972
392.	**Dash, Straus & Goodhue** (206) Boxborough, MA Tests electronic & telecomm. equipment	742	4,917	584	C	A	47	9	1980
393.	**BTG** (188) Vienna, VA Develops software; integrates computer systs.	741	23,542	2,799	D	D	240	48	1982
394.	**Sunny Waterbeds & Accessories** (469) Orlando, FL Mfrs. waterbeds, furniture, & accessories	739	1,426	170	C	A	40	6	1983
395.	**Enterprise Builders** Avon, CT Provides general contracting svcs.	737	11,245	1,344	D	F	30	3	1984
396.	**McLennan & Thebault** Elk Grove Village, IL Provides design & construction svcs.	735	17,992	2,156	D	D	29	12	1912
397.	**G.O.D.** (61) Kearny, NJ Provides overnight freight svcs.	733	16,504	1,981	D	D	324	68	1982
398.	**CareerTrack** (284) Boulder, CO Provides professional dvlpmt. training svcs.	733	51,434	6,177	C	D	328	38	1982
399.	**SYME** (371) Chagrin Falls, OH Mfrs. containers for hazardous-waste disposal	729	9,940	1,199	D	D	100	2	1978
400.	**Badger Products** Waterloo, IL Designs & mkts. shoe accessories	727	2,389	289	C	B	3	2	1983
401.	**Original Copy Centers** (264) Cleveland, OH Owns & operates copy centers	725	4,910	595	D	A	106	12	1975
402.	**Team Food Management** (350) Michigan City, IN Operates Little Caesar's pizza franchise	725	14,900	1,806	D	C	166	28	1982
403.	**Simmons Communications** (321) Stamford, CT Operates cable-TV systs.	722	66,660	8,111	F	F	542	75	1982
404.	**Glenn M. Gelman & Associates** Irvine, CA Provides accounting, tax, & financial svcs.	721	1,306	159	B	A	25	5	1983
405.	**All Gulf Contractors** (221) Mobile, AL Provides asbestos-abatement svcs.	719	7,250	885	C	C	41	13	1980
406.	**Sarbo** Novi, MI Provides concrete connecting svcs.	714	9,970	1,225	D	D	20	12	1957
407.	**MMPS** Toledo, OH Sells & svcs. office machines	711	3,649	450	C	F	34	5	1980
408.	**Mr. Trees** San Anselmo, CA Provides tree care & maintenance svcs.	710	1,004	124	F	A	18	3	1983
409.	**Persons** Watertown, SD Mfrs. signs & related products	709	14,981	1,847	C	C	354	40	1980
410.	**Manten** Houston, TX Imports & dists. steel products	705	15,891	1,973	C	D	8	5	1982

TOM STAFFORD/GAMMA

#364 and #388

Terry Shultz
Louisiana Business College of Monroe
Draughon Training Inst.
Career schools

GROWING UP

Mother Homemaker
Father Bought and managed the two schools
Hometown Alexandria, La.
Education Some business school; general aviation training
Jobs Went directly into working at the schools

GETTING HERE

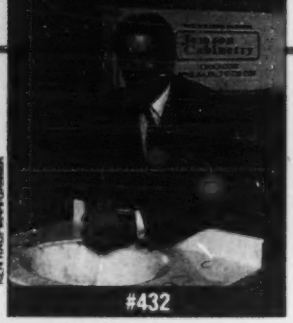
"My father died when he was 47. I was 21 and my mother and I wanted to keep the family business. So I moved up to Shreveport and started learning the ropes."

MY COMPANY, MY SELF

Inspiration Being around intelligent people, the doers
Family in Business Sister, in marketing department
What's Changed "Your identity changes many times over through rapid growth. Who you are as a manager, as a person, your role in the company."
Lose Sleep Over Bringing in new students
Workweek 50 to 60 hours
Last vacation Took their kids to Disney World last December
Use a PC? Sometimes
What's Next Recently started a software company

FOOTNOTE

"I think some of the self-discipline I learned from aviation has given me the strength to face the challenges in this business. It teaches you self-confidence. Initially one of my biggest challenges was my youth. People don't quite accept you when you're very young. I don't feel that too much anymore; a lot of it has to do with my self-confidence."



KEN KALFUSS/GAMMA

#432

Ray Martin
Jemson Cabinetry Inc.

Distributor of kitchen and bath cabinets

GROWING UP

Mother Homemaker
Father Minister, farmer
Hometown Ephrata, Pa.
Education High school
Jobs Ran a chicken farming operation, construction company

GETTING HERE

"I was buying my kitchen cabinets from a local distributor, and I loved the products he was handling, but he ended up losing the line. The factory eventually offered me the distributorship."

MY COMPANY, MY SELF

Inspiration "I'm rather a religious person, and think there's a higher meaning in life than seeing how many dollars I can make."
Family In Business Father helped start the company
What's Changed "I've turned over the day-to-day responsibilities—in fact, just this week a CEO was named in the company. I don't enjoy management much, and it was time to leave the business to professional managers."
Lose Sleep Over Not much, now that others run the show
Workweek 20 hours in helping new CEO
Last Vacation Week in Vermont this summer with wife and kids
Use a PC Yes
What's Next Active investor in several small firms; public service

FOOTNOTE

"Up to half my time I'd like to contribute to nonbusiness groups; for instance, I'm on the board of a housing advocate for low- to middle-income families. And I'm in, I guess you could say, a venture capital position with some companies. That's where my interests lie now."

411.	**ERM Group** (353) Exton, PA Provides environmental engineering svcs.	704%	$117,266	$14,592	C	C	910	170	1977
412.	**Caber Systems** (81) Miami, FL Sells microcomputers & accessories	700	34,854	4,358	D	D	85	10	1982
413.	**Sunglass Distributors** (455) Richmond, VA Wholesales to grocery & convenience stores	699	1,319	165	E	C	12	3	1981
414.	**Sunsoft** Albuquerque, NM Mfrs. soft contact lenses	699	6,496	813	B	B	249	30	1982
415.	**Viking Engineering** (239) Tarpon Springs, FL Mfrs. pressure washers & lawn equipment	699	2,755	345	D	D	26	5	1981
416.	**AC3** Birmingham, AL Resells microcomputers & related equipment	698	64,141	8,035	D	D	122	24	1980
417.	**Lebrecht Stephenson & Hagen** Milwaukee, WI Provides advertising & PR svcs.	694	1,461	184	D	F	8	8	1982
418.	**Seed Research of Oregon** Corvallis, OR Distr. turf grass seed	693	6,231	786	D	D	20	1	1983
419.	**New Boston Associates** Boston, MA Provides permanent- & temporary-help svcs.	692	19,849	2,505	C	D	136	38	1978
420.	**1st American Rental Center** (66) Lithonia, GA Rents & sells home appliances & furnishings	691	7,114	899	F	B	150	27	1983
421.	**Interactive Learning Systems** Atlanta, GA Provides computerized vocational education svcs.	691	5,763	729	A	F	133	31	1982
422.	**East Coast Auto Rental** Neptune Beach, FL Provides auto rental, tour, & charter svcs.	690	1,051	133	D	D	25	3	1983
423.	**Renaissance Investment Mgmt.** Cincinnati, OH Provides investment mgmt. svcs.	686	10,025	1,276	A	A	36	9	1978
424.	**Molly Maid** (273) Ann Arbor, MI Franchises residential cleaning & maid svcs.	686	3,590	457	D	E	2,553	475	1979
425.	**Automation At Work** (125) San Jose, CA Develops & sells microcomputer software	684	6,524	832	F	E	60	12	1983
426.	**Pride Transport** Salt Lake City, UT Transports perishables & commodities	683	6,325	808	B	C	80	8	1979
427.	**B2A Consultants/Sursat** Belle Mead, NJ Surveys land with satellite applications	681	1,803	231	A	A	19	11	1982
428.	**Windline Amanet** (489) Los Angeles, CA Mfrs. marine, industrial, & aerospace products	678	3,096	398	C	D	33	12	1980
429.	**MD&A Group** Kingston, NY Provides mkt., advertising, & design svcs.	677	6,055	779	D	D	35	8	1979
430.	**Micrografx** (265) Richardson, TX Develops & mkts. graphics software	677	11,581	1,491	B	D	150	20	1982
431.	**Carts of Colorado** Commerce City, CO Mfrs. mobile food svc. equipment	675	6,831	881	F	D	80	4	1984
432.	**Jemson Cabinetry** Ephrata, PA Distr. kitchen & bath cabinetry	675	6,955	897	D	D	57	7	1984
433.	**Advanced Network Design** La Mirada, CA Provides communication cost mgmt. svcs.	675	1,287	166	C	F	28	2	1978
434.	**Villa Enterprises** (457) Florham Park, NJ Operates Italian fast-food restaurant chain	675	23,079	2,979	A	A	120	22	1988
435.	**Computer Managers** New York, NY Provides data-processing svcs.	674	1,083	140	D	E	8	2	1983
436.	**Research Analysis & Maintenance** (86) El Paso, TX Provides defense contracting svcs.	672	6,122	793	D	A	170	13	1978
437.	**Datasec** (150) Wilton, NH Mfrs. computer products for government	672	8,466	1,097	F	D	72	16	1979
438.	**Midwest Publishing** Southfield, MI Provides telemkt. svcs.	671	8,630	1,119	C	C	100	19	1978
439.	**Arizona Freight Systems** Phoenix, AZ Provides common- and contract-carrier svcs.	671	1,696	220	D	F	40	8	1984
440.	**Currier Construction** (390) Auburn, NY Provides contracting & construction svcs.	670	4,646	603	F	E	16	11	1976
441.	**Advanced Systems Concepts** (347) Schaumburg, IL Mfrs. & sells computer software	670	2,548	331	E	E	9	4	1982
442.	**VHP** Sharon, PA Mfrs. exercise equipment	666	1,142	149	D	E	22	5	1984
443.	**Lander Transport** (399) Greeneville, TN Provides truckload carrier svcs.	660	30,324	3,992	E	D	524	145	1981
444.	**Comark** Glendale Heights, IL Distr. computers & accessories	659	52,526	6,916	D	D	96	44	1977
445.	**Lee Agency** Fairfax, VA Provides manufacturer's representative svcs.	657	2,330	309	D	D	15	1	1983

FRANCO SALMORAGHI

James Delano
Lion Coffee
Coffee roaster and distributor

GROWING UP

Mother Teacher and worked in family business
Father Runs wholesale distribution company
Hometown St. James, Mo.
Education B.A. art history
Jobs Worked for father, renovated historic building

GETTING HERE

"I studied design and had seen the original Lion Coffee trading cards from the 1880s and 1890s. The company had an illustrious career in Toledo but had ceased manufacturing; I thought having an historical brand of coffee at the coffeehouse I was building in Honolulu would make a nice tie-in."

MY COMPANY, MY SELF

Inspiration "I couldn't work for a stodgily managed company, and I really enjoy providing a good place for people to work."
Family in Business Father on board of directors
What's Changed "If there are things I miss, I start doing them again. I enjoy running the espresso machine at the caféat our roasting plant and unloading the coffee bags—I like the physical labor."
Lose Sleep Over Keeping shelf space in stores
Workweek 50 hours
Last vacation New York City, Vancouver
Use a PC? Yes
What's Next Reopen the original downtown coffeehouse

FOOTNOTE

"All the outside interests that people bring to the company are important. I want people to live and breathe Lion Coffee part of the time, but I want them to have other interests that move their souls a little bit."

	Company (1988 rank) Business	3-year growth	1988 sales ($000)	1984 sales ($000)	Employees	Profile	1988 employees	1984 employees	Year
446.	**Ovation Marketing** (333) La Crosse, WI Provides advertising svcs.	655%	$2,696	$357	C	D	38	8	1978
447.	**Lion Coffee** Honolulu, HI Roasts, packages, & distr. coffee	655	5,752	762	B	E	60	7	1979
448.	**Jenny Craig** (6) Del Mar, CA Operates chain of weight-loss centers	654	68,574	9,094	B	D	2,300	300	1983
449.	**Tom Walz** Tacoma, WA Mfrs. saw tips	654	754	100	C	C	25	5	1981
450.	**PC Warehouse** Marietta, GA Sells & svcs. computers & related equipment	653	5,513	732	D	E	22	3	1983
451.	**Walton Manufacturing & Rebuilding** Delphi, IN Fabricates steel	651	1,187	158	B	B	17	4	1983
452.	**Paul's Discount Optics** Danbury, CT Sells specialty optic equipment	650	780	104	B	B	1	1	1978
453.	**Best Cuts** Cleveland Heights, OH Operates chain of hair salons	647	3,573	478	B	F	834	85	1984
454.	**Plow & Hearth** (275) Madison, VA Sells consumer products through mail order	642	6,385	860	E	F	54	20	1980
455.	**Phone Bank Systems** East Lansing, MI Provides fund-raising through telemkt.	642	838	113	A	F	3	2	1983
456.	**Frontier Engineering** (295) Stillwater, OK Mfrs. electronic instrumentation & engineering svcs.	639	21,632	2,929	D	D	425	95	1973
457.	**Micron Separations** Westborough, MA Mfrs. filter devices	635	5,021	683	B	F	55	20	1982
458.	**FiberCom** Roanoke, VA Develops fiber-optic communications systs.	633	17,719	2,418	D	C	169	19	1982
459.	**Hellcomb International** (319) Tulsa, OK Mfrs. composite panels	632	5,771	788	C	F	85	25	1981
460.	**ORMEC Systems** Rochester, NY Mfrs. electronic motion controls	631	3,811	521	C	F	43	8	1982
461.	**Universal Computer** (156) East Rochester, NY Sells & svcs. computers	630	2,461	337	D	D	12	5	1983
462.	**Promar** (463) Rockport, TX Provides oil-field & offshore production svcs.	630	2,884	395	C	F	38	10	1979
463.	**New England Builder** Richmond, VT Publishes construction trade magazine	629	984	135	A	B	11	1	1982
464.	**RailTex** San Antonio, TX Manages & owns short-line railroads	629	14,206	1,950	C	C	88	15	1977
465.	**Planning Analysis** (382) Arlington, VA Provides information technology application svcs.	628	2,476	340	D	F	24	4	1981
466.	**Information Technologies** Richmond, VA Develops software	625	1,146	158	F	F	17	5	1981
467.	**Soltech** Shelbyville, KY Mfrs. accoustical & thermal products	623	8,038	1,111	D	E	138	16	1983
468.	**Pro-tech Industries** Vancouver, WA Mfrs. aluminum products	621	2,494	346	C	F	24	3	1980
469.	**Myers-Holum** New York, NY Provides accounting & consulting svcs.	621	2,811	390	D	D	55	4	1984
470.	**Symplex Communications** (26) Ann Arbor, MI Mfrs. data-communications equipment	620	16,532	2,297	A	F	77	20	1981
471.	**M. Lavine Design Workshop** Cold Spring, MN Mfrs. retail store decorations & fixtures	619	1,079	150	D	F	7	4	1981
472.	**Your Staff** Woodland Hills, CA Provides employee leasing svcs.	619	21,939	3,051	D	F	20	3	1979
473.	**Gallson Books** New York, NY Publishes address books, journals, & posters	618	3,179	443	C	C	4	2	1978
474.	**Vanderveer Group** (212) Fort Washington, PA Provides mkt., consulting, & research svcs.	616	14,160	1,977	D	D	112	18	1979
475.	**RJE Communications** (118) Sunnyvale, CA Designs & mkts. microprocessor-based systs.	614	13,245	1,854	D	C	127	10	1981
476.	**Future Now** Cincinnati, OH Distr. computers	614	15,800	2,214	D	D	87	26	1976
477.	**O/E Automation** (245) Troy, MI Leases, sells, & svcs. office equipment	613	94,538	13,265	F	D	700	92	1979
478.	**National Communications** (146) Miami, FL Provides sales promotion svcs.	611	3,890	547	C	D	23	5	1982
479.	**Classic Graphics** Charlotte, NC Provides high-quality printing svcs.	611	1,813	255	D	D	22	6	1983
480.	**Glazen Communications** Cleveland, OH Provides advertising svcs.	611	8,576	1,207	E	D	36	5	1970

481.	**Del Paso Pipe & Steel** Sacramento, CA Distr. pipe & steel	609%	$3,267	$461	D	C	12	4	1939
482.	**Northern Lights Enterprises** Wellsville, NY Mfrs., imports, & exports candles & gifts	607	1,061	150	D	D	40	1	1976
483.	**Gerber Alley** Norcross, GA Provides health-care information systs.	606	27,284	3,864	C	B	241	26	1983
484.	**Maresco International** Bridgewater, NJ Provides export mgmt. svcs.	605	5,190	736	D	D	9	2	1983
485.	**Ghafari Associates** (270) Livonia, MI Provides architectural & CAD svcs.	604	11,323	1,609	D	D	161	46	1962
486.	**C. Kirk Steele Insurance Services** Lake Forest, CA Provides insurance brokerage svcs.	603	1,899	270	E	C	7	4	1982
487.	**National Business Institute** Altoona, WI Provides direct-mail svcs.	601	5,241	748	D	F	37	20	1984
488.	**Quality "S" Manufacturing** Phoenix, AZ Mfrs. trailer hitches & accessories	593	9,270	1,337	B	B	110	20	1977
489.	**Industrial Restorations** East Petersburg, PA Provides contract painting & wall-covering svcs.	593	831	120	F	C	23	3	1982
490.	**Wright Travel** Nashville, TN Provides travel management svcs.	591	2,500	362	C	C	97	10	1981
491.	**Aquidneck Mgmt. Associates** (296) Middletown, RI Provides systs. mgmt. & consulting svcs.	589	10,597	1,538	E	C	237	45	1981
492.	**ComputerTech Integrators** Sacramento, CA Provides computer consulting svcs.	588	1,067	155	C	F	30	4	1980
493.	**Scioto Valley Hot Tubs & Spas** (196) Hilliard, OH Retails spas & hot tubs	588	3,418	497	F	D	22	5	1982
494.	**Superpumper** Minot, ND Operates convenience store chain	585	10,382	1,515	D	F	82	10	1983
495.	**Celebrity** Placerville, CA Mfrs. & distr. auto accessories	585	5,795	846	D	D	90	47	1961
496.	**Endless Vacation Travel** Grandville, MI Operates travel agency reservation center	582	19,191	2,813	F	D	180	6	1976
497.	**Softa Group** Northbrook, IL Mfrs. & mkts. computer-based solutions	581	2,840	417	C	F	41	10	1982
498.	**Bio-Diagnostics Laboratories** Torrance, CA Provides medical, clinical, & lab svcs.	579	3,472	511	C	F	65	15	1980
499.	**Qosina** Farmingdale, NY Mfrs. & distr. medical & cosmetic disposables	575	837	124	E	F	4	4	1980
500.	**INFOTEC Development** Santa Ana, CA Provides computer systs. & software engineering	573	46,117	6,856	D	D	720	175	1979

MIKE DITZ

#485

Yousif Ghafari
Ghafari Associates Inc.
Architectural and engineering services

GROWING UP

Mother Homemaker
Father Tobacco company employee
Hometown Alma El-Chaab, South Lebanon
Education Masters degrees in math and in engineering
Jobs Engineer at another firm

MY COMPANY, MY SELF

Inspiration Japanese managers
Family in Business Wife, corporate counsel; cousin, VP of finance; sister, clerical; sister, sales
What's Changed "Bankers. Now, they're knocking on our door."
Lose Sleep Over Keeping employees happy as company grows
Workweek 50 hours
Last vacation This fall, to Europe
Use A PC? Yes
What's Next Open new offices

HOW THE INC. 500 WERE SELECTED

Putting together the INC. 500, like qualifying for the list itself, is a long-term project. As soon as one year's package is sent to press, the process begins again. We search for nominees by contacting accounting firms, venture capitalists, state development agencies, trade associations, and chambers of commerce. More than 20,000 potential candidates received nomination forms this year.

To gain a spot on the 1989 INC. 500, a company must have been independent and privately held on July 3, 1989, the day applications were due. This year's rankings are based on the percentage increase in sales from 1984 through 1988. Companies had to show at least $100,000 but no more than $25 million in sales for 1984 and had to register a sales increase between 1987 and 1988. Holding companies and regulated banks and utilities are not eligible.

Information on each application was verified by tax forms and by telephone conversations with company officials and their independent accountants—a task that falls mainly to our summer interns. If your company is on this year's list you talked with Katherine Apruzzese, a 1989 graduate of Dartmouth College; Duff Berschback, a junior at Kenyon College; Haley Collins, a 1989 graduate of Franklin and Marshall College; Christian Forman, a sophomore at Colby College; Kathryn Hann, a 1989 graduate of Temple University; Raquel Melo, a sophomore at Brown University; Jennifer Rapaport, a senior at Brown University; Timmie Walker, a senior at Georgetown University; or Wayne Woolley, a senior at Pennsylvania State University.

The INC. 500 is prepared under the direction of special projects editor Sara Baer-Sinnott and assistant research editor Deborah Weeks. Staff writer Leslie Brokaw wrote the profiles that appear among the listings.

The information published here is the only material that INC. will make available.

STEVEN LAXTON

Sara Baer-Sinnott, Deborah Weeks (center), and interns

HELP WANTED

The rising cost of health care is hurting small companies everywhere. While there are no grand solutions, there are steps you can take to keep your costs down

BY STEPHEN D. SOLOMON

WANTED: chief operating officer for a dynamic West Coast engineering company. High-level position for nonsmokers only. Cholesterol level below 200 mg/dl, favorable LDH a must. No drugs, no fat, no high living. Salary commensurate with family health history. Apply to: Director of Employee Benefits, Box 990, Los Angeles CA 92312.

*Includes employee's contribution. Source: A. Foster Higgins & Co., New York City, 1988

It hasn't come to this. But with the general inflation in health-care costs, who could blame a company owner for fantasizing about placing such an ad? After all, annual premium increases of 20% to 40% have been routine in recent years. And many experts expect rates to rise an average of 15% a year over the next five years, which means that employer costs could double between now and the mid-1990s.

None of this comes as a surprise to Jim MacDougald. When he renewed his company's medical plan last year, the insurance company had raised the premium 70%. That was tough to take for a business with 25 employees and $4 million in sales. It was especially tough for MacDougald, chief executive of Applied Benefits Research Inc., because his Clearwater, Fla., consulting firm assists *other* companies with their benefit plans.

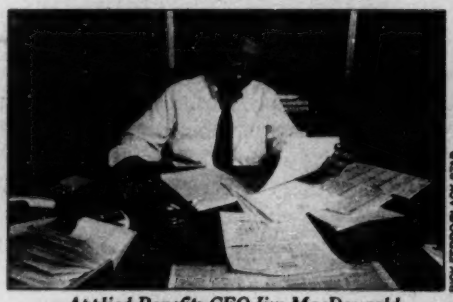
The reason for the hike: an employee's dependent was confined to a hospital with a long illness. Since no other insurer would touch MacDougald's company, "we got stuck," he says, "with paying any blackmail price they wanted to charge."

Being at the mercy of an insurer is fairly common for small companies these days. But MacDougald knew better than to let himself be whipsawed again. He's making changes in his medical plan, including various cost-containment programs and cost sharing with employees.

Unfortunately, though, not all cost-containment strategies are available to all companies. One variable is location; generally, businesses in densely populated states have the most choice. Another is size. Insurers offer companies with more than 100 employees a broader selection of medical plans than they do smaller companies.

Still, most CEOs owners can follow Jim MacDougald's lead and take steps to reduce their premiums, or at least limit the rate of increase. And they can do it without gutting their plans or compromising the care their employees receive.

While the steady increase in health-care costs is a tide that no single company can turn back, there are strategies to help you manage these costs more effectively. Yet the most successful CEOs go beyond what's written in an insurance contract. They give employees an incentive to be involved in the *company's* health. Whether it be because of profit sharing, information sharing, equity participation—or all three—these employees are cost conscious not only about health care but about every phase of the business. Holding down costs is to their advantage as well as the company's.



RICK FERRO/BLACK STAR

Applied Benefits CEO Jim MacDougald
Hit with a 70% insurance hike

CHARTS: ELIOT BERGMAN

WHEN YOUR COMPANY'S TOO SMALL TO GET DISCOUNTS: HEALTH-CARE COALITIONS

What group of 125,000 people has received increases of only 21% in their health-insurance premiums since 1984? A big company with the muscle of, say, Mobil Corp. or Procter & Gamble Co.? Wrong. It's a coalition of 6,400 small companies in the Cleveland area whose $105 million in annual premiums speaks the language that insurers can understand: size and power.

Companies with fewer than 100 employees get little attention in the insurance marketplace; they are the small fish that everyone throws back. Their choices are limited and they pay more for everything they do get. That's why, in 1974, the Council of Smaller Enterprises (COSE) in Cleveland, part of the Greater Cleveland Growth Association, bargained with Blue Cross/Blue Shield of Ohio for a 10% discount on the cost of group health-care benefits for its member companies.

The plan was not very successful; between 1978 and 1982, premiums soared by 130%. So COSE tried a different tack. Instead of acting simply as a conduit through which its members bought insurance, COSE itself became the customer, looking to all the world like a *Fortune* 500 company. Premiums dropped 15% in 1985, the first full year under the new plan, and in the next four years rose by an average of less than 9% annually—at a time when increases nationwide were running 20% to 40%.

COSE's performance reflects the realities of an insurance marketplace in which size and power are next to godliness. It negotiated a variety of sophisticated plans with various cost-control features and took over administration of the plans, including centralized enrollment, billing, and reimbursement. Insurers charge between 5% and 15% of the premium for administration costs; COSE charged less than 1%.

"For many small companies, the only hope they have to bring costs under control lies with the formation of purchasing groups," says John Polk, executive director of COSE. But coalitions need not be as big as COSE to be effective. A handful of other purchasing groups flourishes around the country, usually organized by local chambers of commerce. In terms of bargaining clout, a chamber is often more effective than an industry trade association because of its ability to concentrate its power on local providers.

Apart from the advantages conferred by size, a coalition is most effective if it does three things:

- Negotiates the plans as if the coalition itself were the customer.
- Administers the plans itself or uses a low-cost third-party administrator.
- Manages the claims information, which will enable it to identify ways to further cut costs.

HOW DID YOU CHOOSE YOUR AGENT?

Chances are good that you went with the insurance agent who sent you a pitch letter and a proposal. And you'll probably dump that person when another agent arrives with yet another promise to lower the cost. But there is a better way: consult with local companies of about your size. Have they used their agent for at least three years? Has their agent been aggressive in incorporating cost-saving mechanisms? Then, of course, interview the agent. Consider your decision as carefully as if you were hiring a key person for your company—because you are.

John Polk of COSE
Favors purchasing groups

WHEN YOU HAVE A GOOD CLAIMS RECORD AND PREMIUMS STILL SOAR: SELF-INSURANCE

In many circles, self-insurance is regarded as a high-risk gambit best suited for poker players with a steady hand. While self-insurance isn't for every company, if you have a good claims record and more than 100 employees, you should at least consider it—especially if your premiums are climbing steeply. You may be able to do much better simply by paying the claims as the bills come in. (Companies with fewer than 50 employees are beginning to organize into self-insurance cooperatives; see Hotline, page 26.)

Sandmeyer Steel Co., in Philadelphia, found itself in that position five years ago. Its annual claims, or loss ratio, were about 70% of the premiums it was paying, which means that the insurance carrier was keeping 30% of the premiums for administrative expenses and profits. Since an 80-20 loss ratio is usually considered fair, the insurer was keeping more than its share. The company, whose 140 employees make stainless-steel products for manufacturers, decided to self-insure.

President and CEO Ron Sandmeyer reports that the company has saved at least 10% a year on its health-care costs. The biggest saving, 5% or more, comes from the lower cost of administration—third-party administrators, companies that handle paperwork on self-insured plans, charge up to half the rate of insurance companies. In addition, self-insured companies don't pay state tax on premiums or cover certain state-mandated insurance benefits, such as psychiatric care, though they may elect to have this coverage. Finally, self-insured companies don't have money tied up in reserve accounts with an insurance company; when Sandmeyer Steel self-insured, it got about $100,000 back from its carrier.

No company should self-insure without buying stop-loss insurance, which puts a lid on what it will pay out in claims. A 100-employee company, for example, might buy stop-loss to pay individual claims over $25,000 or the year's aggregate claims above $300,000. To calculate the aggregate, insurers usually add 20% to the prior year's claim record to adjust for industry trends, then another 20% to 25% in margins.

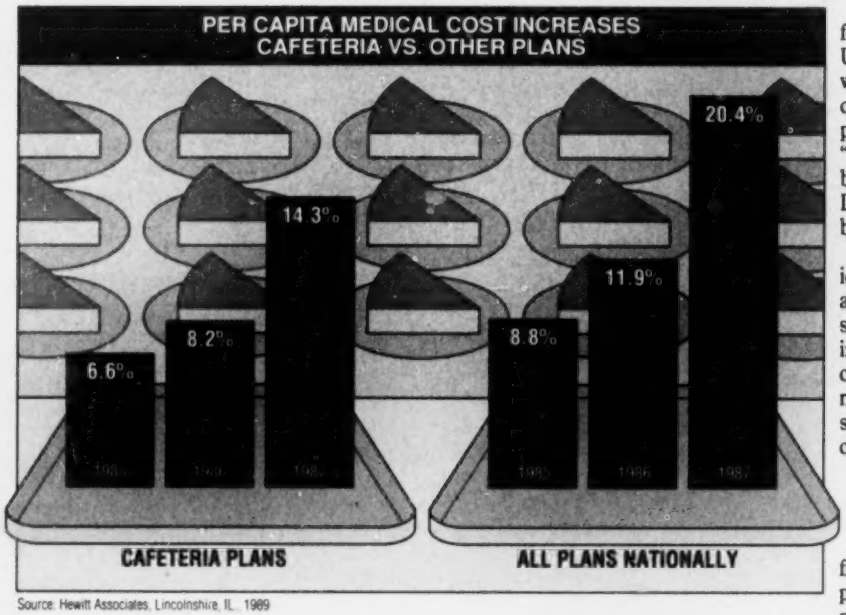
With stop-loss, companies can limit the risks of self-insurance and budget at the start of each year for the maximum possible claims. Experts urge companies to establish their own reserve funds so that an unexpectedly high claim or a drop in cash flow doesn't leave employees waiting months to be reimbursed for their claims. *(continued)*

CEO Ron Sandmeyer
Saves 10% a year on costs

WHEN YOU WANT TO CONTAIN COSTS AND LET EMPLOYEES PICK THEIR BENEFITS: CAFETERIA PLANS

Employees of The Bank Mart will each tell the personnel department what benefits they want in 1990. Just as they did in 1989.

The mutual savings bank, in Bridgeport, Conn., started a cafeteria plan a few years ago for its 220 employees. Once an option only for large companies, cafeteria plans are now routinely available for companies with as few as 50 employees. In cafeteria plans—also known as flexible benefits—the employer's contribution usually comes in the form of a spending credit, which the employees use to "purchase" various options from a menu of benefits. One person might choose more health insurance and less life insurance; another, less healthcare and more life and disability coverage.



Source: Hewitt Associates, Lincolnshire, IL, 1989

For employees, this flexibility is attractive because they can tailor their benefits and levels of coverage to their own needs. For companies, it can mean savings on health-care costs. In a survey last year by Hewitt Associates, a benefits consultant in Lincolnshire, Ill., per capita medical costs for cafeteria plans rose 14.3% in 1987, compared with 20.4% for private plans nationally.

The Bank Mart's experience shows how flexible plans can achieve these savings. Under its plan, the number of employees who opted out of medical coverage (because they were covered by their spouses' plans) increased from 10 to more than 30. "Before, 20 people were taking it simply because it was given to them," says Carol Levey, manager of compensation and benefits.

Other employees chose lower-cost medical options, such as higher deductibles and copayments, and used the credits they saved on something else. This brought immediate reductions in the cost of health coverage. And the company will likely see more reductions in the future, since cost-sharing usually reduces overuse of medical services.

Even greater savings could come later because the company, if it chooses, can avoid the full burden of future increases in medical costs. The plan moves it away from the traditional defined benefits approach—we'll provide certain benefits, no matter what the cost—to a defined contribution approach. Each year, The Bank Mart will set its level of contribution to the entire benefits package, most of which goes to the medical plan; if the cost of medical coverage increases 20%, for instance, the company might raise its contribution by only 10%, leaving to employees the choice of either spending more of their own dollars or opting for a less expensive plan.

"We know that down the line, costs are increasing," says Levey. "I have a feeling that in 1990, we will be sharing more costs with employees."

BARRY TENNY

Benefits manager Carol Levey
Flexible coverage works.

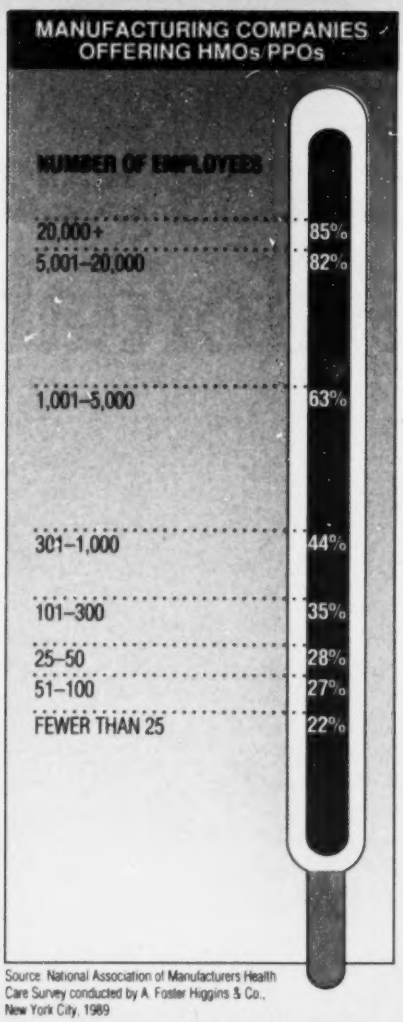
WHEN YOU'RE LOOKING FOR ALTERNATIVES TO YOUR INDEMNITY PLAN: HMOs and PPOs

The news was bad for Tassani Communications: last April the company's insurer gave notice of a 50% increase for the plan year. Desperate to contain costs, the $25-million, 60-employee company scrapped its indemnity plan for a preferred provider organization, or PPO. The premium increase declined to 30%, still high but several thousand dollars less each month than the indemnity plan.

Tassani joins a growing number of companies offering managed care, which includes PPOs and health maintenance organizations, or HMOs. More than 60 million Americans are enrolled in managed care, most of them in plans offered by large companies. Fewer than a third of the small manufacturers in a National Association of Manufacturers survey offered HMOs or PPOs in 1989.

But they soon will. Insurers that once ignored the small end of the market now are competing to sign up companies with as few as two employees. The reason for small companies to heed the new pitch is compelling—managed-care plans usually save money. In addition, enrollment in a managed-care plan enables small companies to avoid much of the cost shifting now going on in the market (see "Negotiate the Best Deal," page 151).

The traditional medical plan, now slowly fading away, is an indemnity program in which providers are reimbursed on a fee-for-service or a cost-plus basis. Employees are free to choose their own physicians and hospitals. That the cost of these



Source: National Association of Manufacturers Health Care Survey conducted by A. Foster Higgins & Co., New York City, 1989

programs has soared should come as no surprise: there are no restraints on use of medical services or on fees charged by providers.

Managed care is supplanting the traditional plan because it is designed to contain costs. Here is a brief guide:

HMOs

HOW THEY WORK: HMOs receive a set annual fee for each enrollee, which gives them an incentive to deliver cost-effective care. Employee payments are limited to about $5 for each visit to a doctor's office. Each patient has a primary physician who controls access to medical services.

YOUR SAVINGS: This varies widely. Some companies report no savings at all, but generally you can expect a 10% savings over the cost of a traditional indemnity plan. Some companies may save as much as 40% if local HMOs are competing vigorously for market share. Premium increases may also be lower. For example, Cigna Corp. reports that its HMO premiums increased an average of 9% a year between 1983 and 1988, compared with 18% for indemnity plans.

WHAT TO LOOK OUT FOR: Check the HMO's reputation for delivering quality care. Also, check its history of premium increases. Beware, too, of offering a choice of an HMO or an indemnity plan. Younger, healthier employees tend to select the HMO, while older, less healthy people become concentrated in the indemnity plan. Indemnity premiums go up as a result—often negating any advantage of the lower HMO rates. The solution is to contract with an insurer that offers both an indemnity plan and an HMO and will base rates on the history of all your employees together.

PPOs

HOW THEY WORK: A network of physicians and hospitals agrees to a fee schedule that usually represents a 10% to 20% discount on their usual charges. The physicians may also agree to a set of procedures designed to keep costs down. Employees can use non-PPO providers, but companies provide incentives—lower deductibles and copayments—to encourage them to stay within the PPO network.

YOUR SAVINGS: You can expect to pay 5% to 10% less than the cost of an indemnity program. If you offer very low deductibles and copayments or waive them entirely—which many companies do when they introduce the program—you may realize no savings at all.

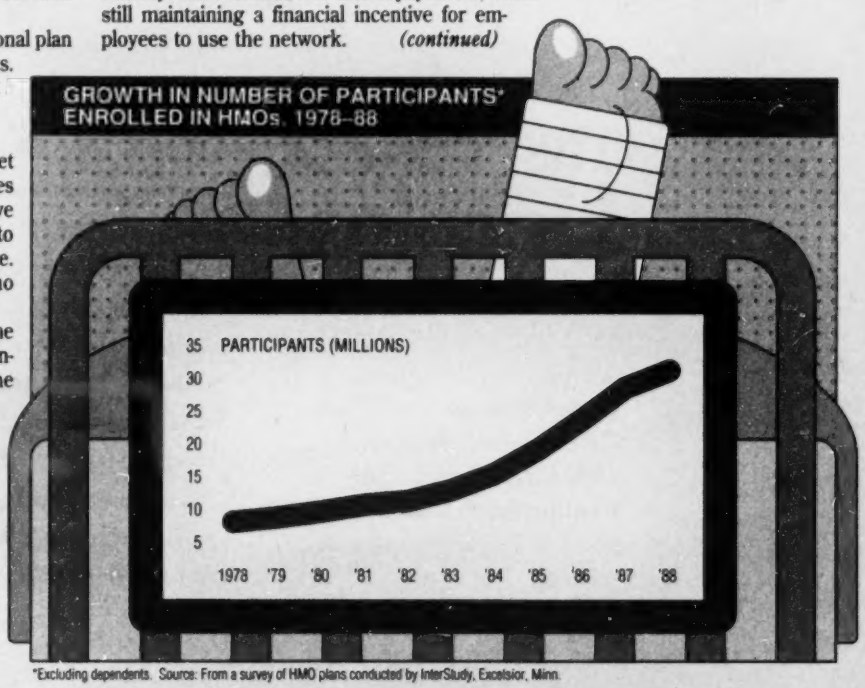
WHAT TO LOOK OUT FOR: Does the PPO have a reputation for quality care? Does it have broad coverage geographically and by specialty? Check the PPO's history of premium increases, since they usually can't control the use of physician services very well, especially when deductibles and copayments are low. "Utilization can go up like crazy," says Larry Tucker, a partner and benefits consultant with Hewitt Associates. The remedy: raise deductibles and copayments, while still maintaining a financial incentive for employees to use the network. *(continued)*

CHECK YOUR DEPENDENT-CARE POLICY

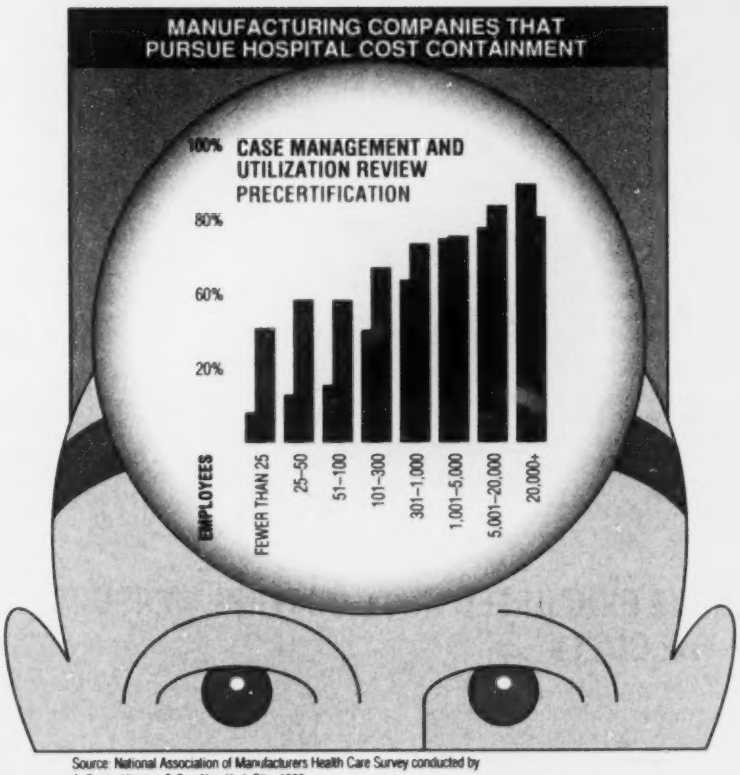
If many of your employees have working spouses, you may want to think through your company's dependent-care policy. When dependent coverage is essentially free, employees may be taking it even though their spouses are covered where they work. So the extra $2,000 or so that your company spends in those cases is wasted. In other instances, the employer of the spouse may be charging for dependent coverage—so if you are providing it free or at a nominal charge, the dependent coverage will end up on your account. The trick is to come up with an amount to curb these problems that is still reasonable for sole breadwinners.

JACK VAN ANTWERP

CEO Sally Tassani
Opted for a PPO



*Excluding dependents. Source: From a survey of HMO plans conducted by InterStudy, Excelsior, Minn.



Source: National Association of Manufacturers Health Care Survey conducted by A. Foster Higgins & Co., New York City, 1989

[illegible]

Few cost-containment strategies are more effective than frank and frequent communication with employees. Smart managers routinely tell employees how much the company spends on medical care and how costs have gone up over the years. Without such information, many employees probably think of health care as "free" in the sense that some faceless insurance company is paying the bills.

Once employees see the relationship between company savings and the resources available for raises, bonuses, and profit sharing, their health-care decisions can change dramatically. And you can help influence those decisions by pointing out the cost savings of using a primary physician or clinic instead of an emergency room for routine care, buying generic drugs, and examining bills for overcharges.

WHEN YOU THINK HOSPITAL BILLS ARE TOO HIGH: UTILIZATION REVIEW

Mark Kaplan is holding two versions of a hospital bill in his hands. Nothing unusual in the first one: tubal ligation, a stay of two days. The hospital wants $3,580.05.

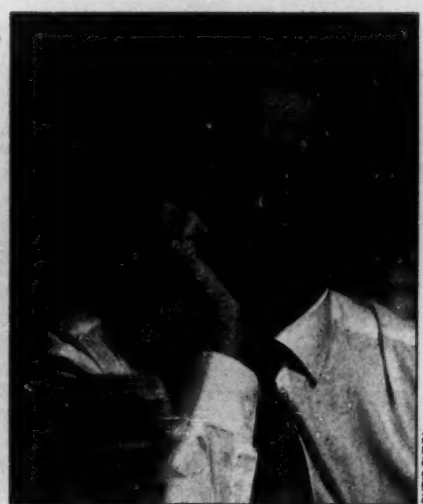
Most companies would pay the bill. Kaplan, director of human resources at Mandel-Kahn Industries Inc., sent it out for an audit instead. The second bill, postaudit, he did pay: $2,696.91. After the cost of the audit, the company saved 16%.

This is routine for Mandel-Kahn, a Houston-based distributor with 800 employees. Every audited hospital bill comes back with savings of at least 15%, and the hospitals don't dispute the new figures. Most of the savings come from reduction of charges that are above the usual and customary, but others are for services that were never performed. "I've had male patients charged for vaginal examinations," says Kaplan. "We've been charged for hospital stays when there wasn't any stay at all."

Auditing the work of health-care providers is part of a broad strategy known as utilization management, which attempts to limit costs by overseeing the length and necessity of hospital stays and many outpatient procedures. The services are provided by many insurance companies and by an array of vendors whose largest player, Intracorp, of Berwyn, Pa., covers 25,000 employers and 11.5 million people. A study published last year by *The New England Journal of Medicine* found that one insurer's program had slashed medical bills by 8.3% for 222 patient groups. And Mandel-Kahn hasn't had a rise in medical costs since 1985.

Utilization review began in the 1970s when many health plans required second opinions before surgery. Today it includes a variety of initiatives:

- **Precertification review.** The centerpiece of the strategy, the review takes place before hospital admittance and is an attempt to prevent unnecessary hospitalizations and limit the duration of hospital stays. Where appropriate, it shifts procedures to less expensive outpatient facilities.
- **Concurrent review.** Once hospital treatment starts, this review controls the length of stay and makes sure the treatment is medically appropriate.
- **Case management.** Broader than concurrent review, it monitors care throughout a catastrophic illness.
- **Mental health and substance abuse-care review.** Various strategies are employed to con-



CHRIS BRAIN

Human resource director Mark Kaplan
Was charged for nonexistent hospital stays

READ THE FINE PRINT

If you're looking for ways to cut health-care costs, one place to start is by examining your current policy—something few executives do. Gust Headbloom, owner and CEO of Apex Broach & Machine Co., a tool and machine manufacturer in Detroit with 51 employees and $6 million in sales, was surprised at what he found in his. Headbloom discovered that his insurer had been routinely billing the company for what struck him as an unusual item—maternity benefits for the company's retirees. His retirees were a lively bunch, to be sure, but Headbloom decided to save the $2,623 a year just the same. "We realized that these rascals just weren't playing around anymore," says Headbloom.

trol soaring costs of care in this area.

■ **Hospital bill audits.** This strategy tries to cut the cost of care by finding overcharges.

Many of these services cost a few dollars a month per employee, but they often save multiples of that. Used by big companies for years, they are available now to businesses with as few as 50 people.

Last year a Mandel-Kahn employee was seriously injured in an automobile accident. Not willing to accept the hospital's charges at face value, the company sent the bill to Intracorp, which conducted an on-site audit. Here are the results:

AUDIT RESULTS (for explanation of charges, see "Facts Behind the Audit," below left)

Total bill	$19,612.74
Less	
Personal items	1.85
Undocumented items	690.90
Charges more than fair and reasonable	5,281.11
Charges unrelated to carrier's responsibility	-0-
Not medically necessary days/services	-0-
Mathematical errors	-0-
Plus	
Undercharges	325.30
Savings	5,648.56
Total recommended payment	13,964.18
Less previous payments	15,650.24
Total due	**$1,686.06 credit**

FACTS BEHIND THE AUDIT

1. **Total bill**
   This is what the hospital charged for the patient's stay.
2. **Undocumented items**
   Eliminated charges for 23 separate items and procedures that either were undocumented or not performed at all. One such procedure was a chest X-ray billed at $64; another was for seven wound dressings billed at a total of $173.20.
3. **Charges more than fair and reasonable**
   Reduced charges, often by half or more, for 81 separate entries. For example, the hospital billed five units of anesthesia at $93.20 each, far above the fair and reasonable cost of $37.50 each; it billed crutches at $65.65 when the fair and reasonable was $31.80; it charged $150 for a drainage instrument whose fair and reasonable was $50.75.
4. **Undercharges**
   Picked up items that the hospital failed to charge, and these were added back into the bill. Many of these were medications.
5. **Savings**
   Net overcharges represented 29% of what the hospital billed. Even after the auditing charge of $590, the company saved 26%.
6. **Total recommended payment**
   What the auditor says the company should pay.
7. **Less previous payments**
   The required payment to the hospital of about 80% of the bill before the audit.
8. **Total due**
   In this case, it's the hospital that owes some money.

WHEN YOU'VE EXHAUSTED COST-CUTTING MEASURES: SHARING THE COSTS

Raising the cost to employees—it's the fastest way for a company to reduce its health-care expenditures. And unless it's handled carefully, it's also the one most likely to cause a rift in management-employee relations.

Companies have several ways to pass on costs to employees. One of the more common practices is to require employees to contribute more to the premium, which reduces the company's cost dollar for dollar.

They also can require employees to pay more for each visit to a health-care provider. One way is to raise the copayment—the percentage that the employee pays for each claim—from, say, 10% to 20%.

Or they can raise the deductible. Raising the deductible from $100 to $250 will slice 8% to 10% off a health-care premium; raising it to $500 will lop off another 10% or so. Companies often reap additional savings because employees who share the costs are likely to use medical services in a more cost-effective way.

A $100 deductible used to be the standard, and still is in certain parts of the country, such as the Northeast. But that is changing. "We used to have 80% of our business in $100 deductibles, but now, more than half is in $250," says Howard Bolnick, president of Celtic Life Insurance Co., one of the leading small-company insurers. "I would expect to start seeing more and more $500-deductible plans being sold."

The idea behind higher deductibles is straightforward enough: employees should insure themselves for the small claims, as they do with auto insurance, and depend on their insurer to cover the bigger or recurrent claims that might be beyond their ability to pay. But raising deductibles to $250 or $500 could severely hurt many lower-paid employees. Some experts suggest implementing a progressive scale that pegs deductible levels and employee premium payments to the level of compensation.

Any plan that takes more dollars out of an employee's pocket can run the risk, of course, of damaging workplace relations. To help reduce the resentment, companies might consider the following strategy:

ANDY GOODMAN

Insurer Howard Bolnick
Sees a trend toward higher deductibles

■ Try other cost-containment measures before looking to employees for a bigger contribution. If you find that you still have to cut down on costs and choose to seek more money from employees, at least you will have established a good-faith attempt to look for other solutions first.

■ Lay a careful foundation for any change in contribution levels. Explain to employees how much their health insurance costs, how much premiums are rising, and how those costs affect the company's profitability and competitiveness.

(continued)

WHEN YOU'RE LOOKING FOR A LONG-TERM STRATEGY: WELLNESS PROGRAMS

Many companies are beginning to see that the personal habits and lifestyles of their employees can have a major impact on health-care costs. That's why more and more now forbid smoking in the workplace or refuse to hire smokers at all.

In a landmark study of its health-care claims from 1980 to 1982, Control Data Corp. found that high-risk employees—those who smoked, had high blood pressure, were overweight, or rarely exercised—cost the company hundreds of dollars more every year in medical claims than their low-risk colleagues.

BOB BARRETT/GAMMA

Personnel director John Gibson
Hires only nonsmokers

Slowly, health insurers are beginning to believe numbers like these. Now, the Travelers Insurance Co., for one, offers discounts of up to 12% for companies of 10 to 49 employees if they rate favorably on several risk factors. John Alden Life Insurance Co., in Miami, offers similar discounts for companies of 25 or fewer employees in the Southeast. And the Greater Oregon Health Service provides its own wellness program to 25 small businesses in the state; if claims for any of the companies fall below a predetermined level, the carrier returns half of the savings to them. Greater Oregon reports that the average company participating in its wellness program saves about $167 per employee per year in health premiums compared with companies that don't participate.

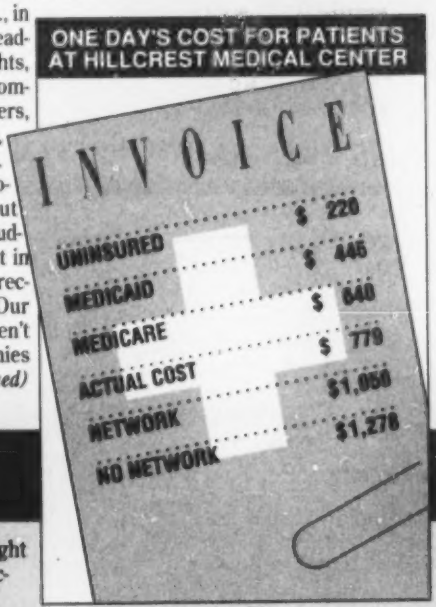
Wellness programs need not strip the treasury bare. Many companies take advantage of free or low-cost screenings and workshops offered by the community outreach programs of local hospitals and by nonprofit health organizations such as the American Heart Association, the National Cancer Society, and the March of Dimes. A fitness program need be no more than the cost of a VCR and a few tapes, or the purchase of T-shirts for employee sports teams.

Companies can spend much more, of course. Maupintour Inc., a vacation tour company with 165 employees, built a small fitness center at its headquarters in Lawrence, Kans., in 1981, outfitting it with a treadmill, stationary bikes, weights, sauna, and lockers. The company hires only nonsmokers, bans smoking in its offices, and sponsors sports teams. The cost of the entire program last year was about $5,000. Maupintour hasn't studied its return on investment in wellness, but personnel director John Gibson says, "Our health-insurance rates haven't gone up like other companies in the area." *(continued)*

NEGOTIATE THE BEST DEAL

You're probably picking up the tab for someone else's "deal." All you need to do is look at the costs of a day's care in a typical hospital, Tulsa's Hillcrest Medical Center. The hospital's average daily expense was $779 last year. A small company's medical plan, though, probably paid something like $1,278.

Hospitals like Hillcrest cut low-cost deals with many parties, then make up for their loss of revenue by shifting their costs to someone else. Uninsured patients paid only $220 per day of the average $779 cost of care at Hillrest last year. And the federal government paid only $445 a day for patients on Medicaid and $640 for those on Medicare. To meet its budget, Hillcrest shifted the costs to private employers. Those within networks such as HMOs negotiated rates of $1,050 a day—far more than the average cost, but still favorable compared with the $1,278 charged to companies with traditional indemnity plans.



Source: Hillcrest Medical Center, Tulsa, Okla.

HOW TO PUT TOGETHER A WELLNESS PROGRAM

Before starting your own, here are some things to consider:

■ **Be sure employees want the program.** They should understand its purpose. Distribute a questionnaire asking for their suggestions.

■ **Target the right people.** "Don't preach to the committed," says Charles Kuntzleman, program director of Fitness Finders Inc., in Spring Arbor, Mich., which designs corporate wellness programs. "You want to get the mass in the middle who dabble in New Year's resolutions."

■ **Go beyond exercise programs.** They often are the first choice of wellness planners, but good programs go beyond that. Work on smoking cessation, weight loss, cholesterol reduction, detection and treatment of high blood pressure, good nutrition, the use of seat belts, treatment of substance abuse, and prenatal health, among others.

■ **Charge employees.** For added motivation, you can bill employees for some of the programs, with reimbursement if they reach specified goals. You might charge $50 for a series of 10 stop-smoking classes but return $5 for each class attended and give a bonus to each person who quits smoking.

■ **Talk up the program.** Acquaint employees with the wellness program least three months before it starts. Use bulletin boards, newsletters, stuffers in paycheck envelopes, and the like.

■ **Look for freebies.** Local nonprofit health organizations may provide booklets, speakers, and even diagnostic testing for free or for a minimal charge.

■ **Make a long-term commitment.** While esprit de corps may improve right away, it's doubtful that you'll see any cost savings anytime soon. It may take five years or more for that to happen. ❑

ONE COMPANY'S SUCCESS IN LOWERING ITS HEALTH-CARE COSTS

EFP Corp. bucked the trend in a big way. Its cost of health-care claims per employee dropped 42.3% over the past two years, from $1,604 to $925. During the same period, other U.S. companies experienced cumulative increases of 40% to 80%. Here's what the Elkhart, Ind., manufacturer of polystyrene products, which now has 230 employees, has done over the years.

In 1979, when EFP had 100 employees, it began to self-insure. That helped to restrain expenses for a while. But claims costs again spiraled out of control, rising nearly 24% in the 1985–86 plan year. EFP decided to redesign its plan—radically.

Until then, the company had had a very generous policy. It paid nearly all costs after a $100-per-year deductible and limited annual out-of-pocket expenses to $1,000. But employees struggled with all the small print and exclusions. "Nobody knew what the plan said," recalls Charles Speas, the director of personnel. "Things were so confusing that people didn't know if they had it good or not. So our first job was to simplify it."

Along with simplification came a different kind of cost sharing. Other companies in the same situation usually raise the deductible and require employees to pay part of the premium. Instead, EFP eliminated the deductible and required employees to pay 25% of each claim. The annual cap on out-of-pocket expenses was set at $2,000 per person or family.

A year later EFP put together its own informal preferred provider organization, or PPO (see box, "When You're Looking for Alternatives to Your Indemnity Plan," page 142). Only insurers and large companies are supposed to have the muscle to hammer out these arrangements, but Speas had no trouble implementing his own limited strategy. Instead of targeting hospitals and individual physicians, as PPOs usually do, Speas arranged 10% to 15% discounts with three local clinics.

The results were dramatic. Claims cost per employee dropped 39% in 1986–87, from $1,604 to $978, and another 5.4% the following year, to $925.

Why did the plan work so well? Simplicity is one answer. "A person can't save money on health care if he can't understand the plan," says Speas. Also, the incentives now were clear: the 25% copayment, starting with the first dollar of coverage, motivated people to comparison shop. "We didn't have to preach to them about being conservative," says Speas. "The plan gave them the incentive to do that."

Visits to emergency rooms, for instance, dropped sharply. People who had used them for routine care now went to the clinics, which were open evenings and weekends and charged a third as much as the hospitals. The PPO saved $5,000 in physician fees the first year and $17,000 the second. Speas routinely circulates comparisons of costs at various hospitals and passes along information about such things as generic drugs. "We show them ways to save, instead of forcing it on them," he says.

The plan didn't mean higher costs for all employees. Almost half had barely used the old health plan at all, perhaps deterred by the deductible. Its elimination gave them, in effect, coverage that they didn't have before. Only those people with large claims paid more, although more cost-effective use of medical services helped hold their expenses down.

Another key to success, says CEO James Chandler, is to realize that rallying the troops around a new plan requires plenty of groundwork. "Don't sneak up on employees with a radical change in their health-care program," he advises. "You can't be silent about the problem for five years and then suddenly say you're going to change everything. You have to talk continuously about the need to control costs." ❑

GO OVER EMPLOYEES' CLAIMS

To help you identify areas of potential savings, you should ask your insurer to send claims information to you, preferably on a quarterly basis. Are your employees using expensive emergency-room services instead of seeing a private physician? Are there big prescription costs that could be cut by using generic drugs or ordering by mail? The next step is to suggest lower-cost alternatives that will save money for employees—and you.

Receiving and acting on claims information is especially important for companies with more than 100 employees because insurers analyze the previous year's claims before setting the premium for the new year. Companies with fewer employees are placed in a pool to determine premiums, but claims information will still be useful if you decide to shop for another insurer. Many won't consider covering a company that can't provide a claims history.

ROARK JOHNSON

EFP's Chandler and Speas
They cut costs by 42%.

HANDS ON

A Manager's Notebook

ENVIRONMENT

NEW YEAR'S RESOLUTION

If a recycling program strikes your fancy but you haven't got a clue where to start, there's a set of guidelines available to get the ball rolling in 1990. And it's free.

Hot off the presses of Rhode Island Solid Waste Management Corp.—a quasi-state agency that manages almost all of Rhode Island's solid waste and also works with corporations and local governments to set up reduction and recycling programs—is a "source reduction poster" that provides suggestions about how you can control waste in your office, production, shipping, and cafeteria areas.

The hands-on waste-management suggestions include: getting off unwanted junk-mail lists with a simple phone call, supplying employees with coffee mugs rather than paper cups, and encouraging suppliers to use environmentally sound packaging material. The other side of the poster features similar advice for controlling waste in the home.

The advice isn't easily overlooked. It's printed as a large poster to help keep everybody vigilant.

Write: Rhode Island Solid Waste Management Corp., West Exchange Center, 260 West Exchange St., Providence RI 02903. There is a $2 fee for additional copies if your business is based outside Rhode Island. ❑

INTERNATIONAL
WHAT NEXT?
1992
Do Europeans believe their unification in 1992 will protect Europe from its two major trading partners — Japan and the United States?
Predict more protection 36%
Predict about the same protection 34%
Predict less protection 26%

RESOURCE

SOCIAL READING

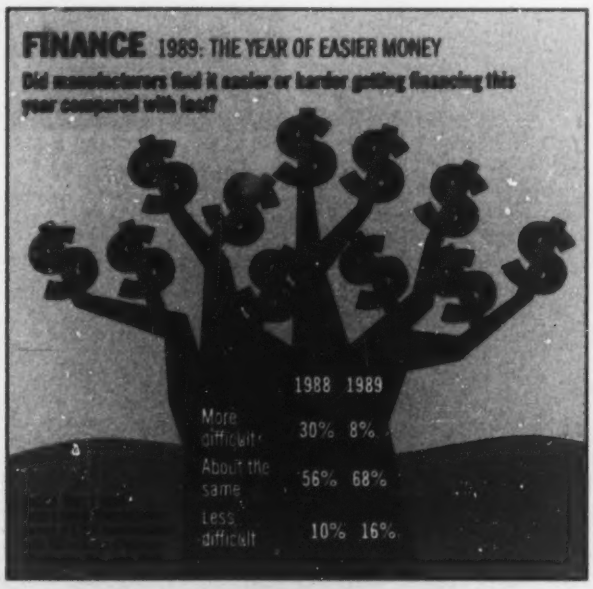
To give what is perhaps the most underappreciated of all benefits its due, there is now a booklet available called "A Look at Social Security—1989." It is prepared and published by A. Foster Higgins & Co., an employee benefits consulting firm.

The easy-to-read publication clarifies the fine print of payments and privileges and includes worksheets and a form your employees can use to request a personal benefit estimate from the federal government. It's a real bargain for four bucks. Write: Lisa Bell, A. Foster Higgins & Co., 125 Broad St., New York NY 10004. ❑

RECRUITING

A HOME AWAY FROM HOME

When push comes to shove in a tight labor market, recruiting farther afield is certainly an option, but how much farther afield? If you want the new recruits to stick around, John Leehman recommends that you look in "areas where the climate is similar to yours and the market is depressed."


FINANCE 1989: THE YEAR OF EASIER MONEY
Did manufacturers find it easier or harder getting financing this year compared with last?
1988 1989
More difficult 30% 8%
About the same 56% 68%
Less difficult 10% 16%

Leehman, executive vice-president of Bread Loaf Construction Co.—a 160-person business in Middlebury, Vt., in the heart of New England's ski region—considered both Denver and Houston as possible recruitment sites since the construction market was flat in both cities. Because Houston's climate differed so dramatically from Vermont's, Leehman ultimately decided to place a newspaper advertisement in ski-happy Denver.

It worked. Résumés flooded Bread Loaf's mailbox. Leehman spent two days in Denver interviewing approximately 30 candidates. Ultimately, he hired four employees.

In the ensuing two years, one did leave after his first six months and another eventually yearned for home and returned to Denver, but, Leehman insists, "For the cost of a hotel room, plane ticket, and 30% of their relocation costs, it was worth it." ❑

MANAGING PEOPLE

REST AREA

To minimize employee wear and tear, if an out-of-town job spills over from Friday to Monday for an Electronic Liquid Fillers Inc. employee, he gets an extra week's pay for spending the weekend in the city of the job site. CEO Jim Ake figures the expense is incidental when the payoff is having a refreshed employee on the job at 7:00 a.m. Monday morning.

Six to eight times a year each member of Ake's 33 bottling machine sales and installation staff spends weekends working away from the $11-million LaPorte, Ind., company. "Given the choice between flying back and forth or staying over, 9 times out of 10 they'll stay over," says Ake, who would just as soon see the money saved on the plane ticket—usually about a week's pay—go into the employee's pocket.

"They're on the road so much that it's not the kind of policy that's abused," says Ake. "But they do appreciate it." ❑

CHARTS: CYNTHIA DAVIS

HANDS ON

EMPLOYEE RELATIONS

FIRST THINGS FIRST

Instead of trying to keep his ambitious staffers from freelancing at the office, Jim Mulien gives them free run of the Wenham, Mass., advertising agency that bears his name after the firm has closed up for the day.

For the cost of a few office supplies, it's a policy that can curb potential office abuse. What's more, he figures, "the more respectfully we treat our employees, the more effective they will be with our clients."

Caveats of the free-lance policy include that employees do no work on their own for Mullen clients and competitors, and that they won't dip into pricey supplies without reimbursing the company.

"Every now and again a person may need extra money, owe someone a favor, or do *pro bono* work," Mullen observes. "That's perfectly understandable. Their work here must come first, but I'm not going to get on the bad side of my employees to save a couple bucks on supplies." ❑

BANKING

ASK AWAY

Conventional business wisdom has it that accountants are good sources of banking contacts. Then don't beat around the bush when interviewing potential accounting firms, figured Flo Gillen, CEO of Soft Inc., a computer-programming consulting firm in New York City.

When searching for an accountant in 1984, Gillen asked point-blank what kind of banking connections the firm could provide on top of its regular accounting services. While it was only a five-person operation at the time, Soft Inc. was growing rapidly and Gillen needed a credit line fast.

All but one of the accountants she interviewed were vague about what connections they had with banks, says Gillen. "That one was pretty blatant about it," she reports. He offered introductions to bankers he knew at Chase, Chemical, and Citicorp.

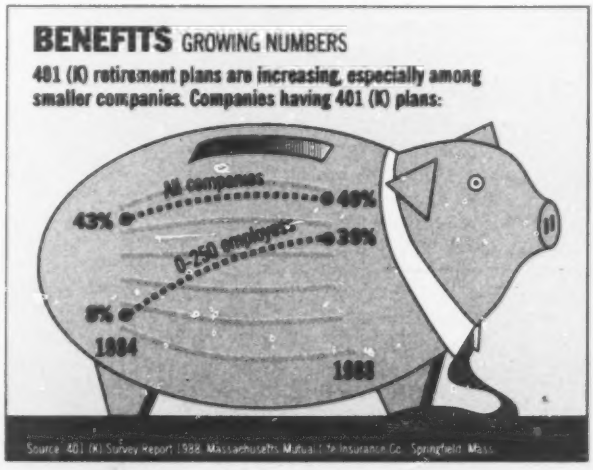
Gillen decided to go with his firm and soon had credit lines to choose from. "Sure, it was gutsy, but we needed the money, and it worked," says Gillen, who today employs 40 programmers. ❑

SALES

PROSPECTING PAYS

A problem with paying salespeople fixed-rate commissions is that, with enough steady customers, they could get lazy. Content to service the customers they know, they may be less eager to sniff out prospects. Bill Bozeman, CEO of Delta Audio-Visual Security Inc., a $3-million company in New Orleans that sells alarm systems to businesses and institutions, found a solution. His salespeople, who normally earn a 4% to 12% commission, can earn an extra 1% when they sell to first-time customers. On a $50,000 installation, that's another $500.

It may not sound like a lot, Bozeman concedes. But the opportunity to earn a bit more has influenced how Delta salespeople—especially the younger ones—spend their time. In the two years since the incentive was established, new-customer sales have risen from 25% of revenues to more than 35%. "Once we have them," Bozeman says, "we're in a strong position to convert them into regular customers." ❑



EQUITY

PLEDGE SPIRIT

Deciding who gets a piece of the action in any company is no easy task. When Jim Scott, CEO of Bulldog Industries Inc., a $9-million Atlanta moving business and plastics company, decided to give key executives a cut of his company four years ago, his selection process was not unlike the time-tested college fraternity system.

Scott makes it clear to executives when he recruits them that after the first year or so, a candidate may be voted into the equity pool by the other—now seven—stockholders. Those chosen must pay dearly for their 1% to 3% of stock. "We figure out how much money someone has got, and then set the price high enough so they really have to sacrifice if they're going to be part of the team," Scott explains.

If stockholders want to quit, they must cash in their chips, and book value price is not an option. "They get what they paid plus interest," says Scott. "The ones who stick with me until the end are the ones who will benefit." ❑

OPERATIONS

SALAD DAYS

During busy times of the year, it's great to be able to count on employees to give 110%. Harry Seifert, CEO of Winter Gardens Salads Co., cooked up a recipe for productivity that's hard to beat. He gives them a bonus *before* the busiest time of year hits.

Just before Memorial Day, when he has the largest demand for his New Oxford, Pa.–made coleslaw and potato salad, Seifert dishes out $50 to each of his 140 employees to whet their appetite for the work ahead. "When I give them the money, I tell them we are going for a record to give them something to shoot for," says Seifert.

"Because employees are trying to achieve a goal," he observes, "they don't feel like they are being taken advantage of during the intense week." Production for that week is 50% greater than bonus-free holidays.

Seifert reserves the bonus for special occasions. "It's like the 100-yard dash," he observes, "you can't expect employees to sprint year-round." ❑

HANDS ON

CUSTOMER RELATIONS

YOU OUGHTA BE IN PICTURES

Want to get a customer's attention? When prospective customers visit Eriez Magnetics, a $50-million manufacturer of magnetic laboratory and metal-detection equipment, the receptionist lines them up underneath a sign with the company trademark on it and snaps their pictures. "It's just our way of saying thank you," says Chet Giermak, president and chief executive officer. "We're complimented you'd come all the way to Erie, Pa., just to see us."

The photos have a more practical purpose as well. Giermak sends them to visitors complete with a cover letter reminding them of their reason for coming and the people they met. He slips the photo into a cardboard frame with the company's mission statement on the back. "It's a little memento," says Giermak. "Sometimes, after getting it, potential customers will let us have a second crack at them."

Giermak says that it takes only a minute to dictate the letter and that each complete package costs about $2, including the stamp. "Most people like to have their picture taken," he adds. "It makes them feel important." ❑

COMMUNICATIONS

SKIPPING AHEAD

The bigger your company grows, the harder it is to tell how employees feel about their jobs. "It's frustrating," says Lacy Edwards, president and chief executive of XA Systems Corp., a $13-million software maker in Los Gatos, Calif. "You just lose contact with people." To help his top executives and himself stay in touch with the rest of the company, Edwards inaugurated annual "skip-level" interviews.

Once a year, employees have a one-on-one conversation with their boss's boss. "How's your job going?" they are asked. "What can we do to make things better?"

"It gives you a legitimate opportunity to explore without going around somebody," says Edwards, who interviews everyone who reports to his six vice-presidents. He has also discovered people who would be perfect for jobs elsewhere in the company. "It's a chance to get to know them a little," Edwards observes. "In a different environment, the interviews could be used to air dirty laundry. But the people here have confidence that they are doing a good job." ❑

ON THE CHEAP

MULTIFUNCTION SOFTWARE

By Cary Lu

Popular computer software, such as WordPerfect, Lotus 1-2-3, and dBase, can easily run $200 to $500 per program. While these programs are deservedly popular, they have far more power than most people need or can use. You can save money by buying a low-cost multifunction program instead. For about $100 you can get a package that does four standard tasks: word processing, spreadsheets, simple databases, and communications with a modem. These programs may not be the best choice if you want to produce a complex business plan or fancy newsletter, but most have plenty of power to turn out letters, reports, invoices, and budgets—essentially all the non-specialized computer tasks a businessperson does. A multifunction program is easier to learn than a collection of separate programs since it includes one user interface for all tasks. All programs described here include a spelling dictionary and support an optional mouse, unless otherwise noted.

The best multifunction programs can open multiple documents, so you can combine data from two files. The leader is Microsoft Works. It has the easiest-to-use interface and word processing to handle large documents, preview your document on screen before printing, and control fonts on laser printers.

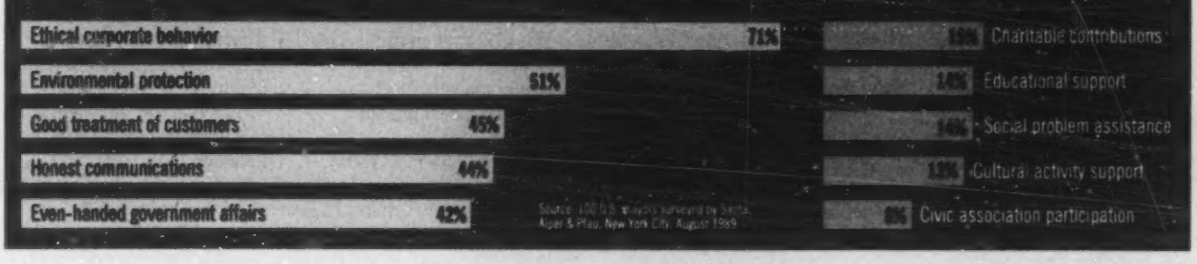
A distant second choice is AlphaWorks (Alpha Software), which has comparable power except in word processing. Its interface is awkward, but it does use standard file formats—plain text, Lotus 1-2-3, dBase—so exchanging files with other people is easy.

Betterworking Eight-in-One (Spinnaker Software) cannot open text and spreadsheet files concurrently but will open two text files simultaneously. It lists for only $59.95 and has many features, such as screen preview for the word processor.

Other multifunction programs are less impressive, partly because they can open only one document at a time. PFS: First Choice (Software Publishing) is nevertheless well designed and easy to learn. DeskMate (Tandy Corp./Radio Shack) is by itself limited, but you can add programs to it. Several companies have programs that can be installed into DeskMate and follow its interface, including a spreadsheet from Lotus and a word processor from Symantec. If you add these programs, however, you'll end up spending several hundred dollars more. ❑

PUBLIC POLICY MONEY ISN'T EVERYTHING

What's necessary for U.S. mayors to support a corporation in their community?

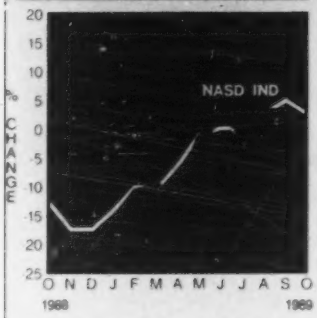


Source: 100 U.S. mayors surveyed by Sirota Alper & Pfau, New York City, August 1989

Reported by Paul B. Brown, Joshua Hyatt, Teri Lammers, Martha E. Mangelsdorf, and Bruce G. Posner

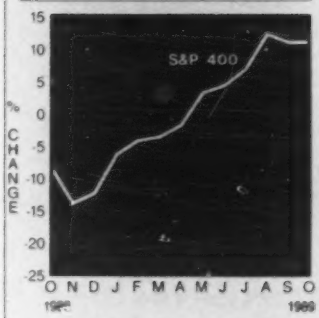
INVESTING IN GROWTH COMPANIES

INC. vs. CONSERVATIVE AVERAGES



All averages start at 0 in October 1987.

INC. vs. SPECULATIVE AVERAGES



All averages start at 0 in October 1987.

IPOs IN THE AFTERMARKET

INITIAL PUBLIC OFFERINGS: SEPTEMBER 1989

O-T-C sym.	Company	Business/product	Offering Size ($ mil.)	Offering Price	First aftermarket bid	Underwriter
ALL[a]	Allstate Municipal Income Trust III	Closed-end fund	60.00	10.00	10	Dean Witter
OIF[a]	American Opportunity Income Fund	Closed-end fund	180.00	10.00	10	Piper Jaffray
APPB	Applebee's International	Operates restaurant chain	23.35	11.50	11¾	Piper Jaffray
OST[a]	Austria Fund	Closed-end fund	60.00	12.00	12¾	Salomon Bros.
BVSI	Brite Voice Systems	Provides audiotext svcs.	13.75	12.50	14	Piper Jaffray
CWP[a]	Cable & Wireless, PLC	Specialty retail chain	280.56	26.72	26	Goldman Sachs
ECP[a]	Central Newspapers	Operates newspaper chain	63.00	21.00	22½	Goldman Sachs
CH[a]	Chile Fund	Closed-end fund	70.00	15.00	15	Salomon Bros.
CMK[a]	Colonial Intermarket Trust I	Closed-end fund	120.00	12.00	12	Paine Webber
ERTS	Electronic Arts	Mfrs. software	16.61	8.00	8¼	Alex. Brown
FAXM	Hotelecopy	Provides fax svcs.	6.30	7.00	8	Josephthal
KPP[a]	Kaneb Pipe Line Partners	Oil pipeline	102.30	22.00	22	Goldman Sachs
MEGIU	Megamation	Mfrs. robotic syste.	3.00	5.00[b]	6	Thomas James
PDN[a]	Putnam Diversified Premium Income Fund	Closed-end fund	96.00	12.00	12	Merrill Lynch
PDI[a]	Putnam Dividend Income Fund	Closed-end fund	110.00	12.50	12½	Goldman Sachs
STGS	Strings Ltd.	Specialty retail chain	3.00	6.00	7	Starr Securities
SLTI	Surgical Laser Technologies	Mfrs. medical lasers	20.30	12.50	15½	Smith Barney
VCOR	Vencor	Provides hospital catering svcs.	13.60	8.50	8¼	Hambrecht Quist

Initial public offerings sold at $1 or less not included. First aftermarket bid is approximate. [a] trading on NYSE; [b] units of 5 common + 4 warrants. Offering data source: *Going Public: The IPO Reporter*, a publication of The Dealer's Digest Inc., 150 Broadway, New York, NY 10038.

STREET TALK Computerized fads come and go, and so, evidently, do the chances of one-day minicrashes such as October's Friday the 13th plunge. (The charts, left, include that 191-point drop in the DJI as well as the following Monday's 88-point recovery). From here on out, the public can only get more lessons on how fast it can lose money thanks to the nonbusiness-related games played by arbitraging speculators. One receding fad is portfolio insurance, an acknowledged contributor to '87's Fall Classic. In that brainless trading technique, computers automatically liquidate entire positions as soon as the overall market declines by a certain percent. Turns out the insured institutional investors didn't appreciate the idea of paying all that commission only to be stranded in cash when the market rallied. Now if a few more of those programs that can mercilessly change an orderly market into a 700-downtick slaughter in five minutes also get comeuppance, there may be hope of returning to the relative sanity of fundamental economics. Don't bet on it, though. In '87, anyone could have seen that equities were overvalued in the light of the country's huge trade deficit—but few did. Is the same kind of I-told-you-so atmosphere shaping up in gold, long considered a safe investment haven? What would happen if the USSR started dumping its vast gold holdings to raise some Western currency?

— Robert A. Mamis

MEDIA POWER

COPYRIGHT ©1989 BY GOLDHIRSH GROUP INC. All rights reserved. Editorial and executive offices at 38 Commercial Wharf, Boston, MA 02110. INC. (ISSN 0162-8968) is published monthly by Inc. Publishing Company, 38 Commercial Wharf, Boston, MA 02110. Subscription rate for U.S. and Possessions, 12 issues $25. All subscription correspondence should be addressed to INC. magazine, P.O. Box 54129, Boulder, CO 80322-4129. Please allow at least six weeks for change of address. Include your old address as well as new, and enclose if possible an address label from a recent issue. Second-class postage paid at Boston, MA, and additional mailing offices. Postage paid at Mississauga, Ontario. POSTMASTER: Send address changes to INC. magazine, P.O. Box 54129, Boulder, CO 80322-4129. Material in this publication must not be stored or reproduced in any form without permission. Requests for permission should be directed to Permissions Coordinator, INC., 38 Commercial Wharf, Boston, MA 02110. Inc. is a registered trademark of Goldhirsh Group, Inc.

DECEMBER 1989 VOL. 11 NO. 12